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ABSTRACT

A demonstration project was conducted in 1975-76 at three locations in Texas to show the effectiveness of the Texas Telecomputer Grid (TTG) as a teaching method in bilingual career education. (TTG is a system designed to connect regional concentrations of computer and television resources by microwaves to transmit televised programs, computer information, and face-to-face conversations without the use of telephones.) A course, entitled "The World of Work: Career Orientation for Adults," was developed to incorporate the basic skills of reading, writing, and arithmetic into the topics of job choice, search, and tenure. Of the 218 adult students who enrolled in the course, the 74% who participated in the evaluation study were for the majority Spanish-surnamed. Except in the area of affective development toward careers and education (which reflected little difference), TTG was found to be more effective than conventional teaching methods, and, in general, to be a flexible, viable delivery system for bilingual career education. Further study is needed to explore (1) the learning style of Spanish-speaking adult students, (2) the application of TTG to other areas of career education, and (3) other possible uses of TTG's ability to simulate face-to-face conversations. (ELG)

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ED164773

FINAL PROJECT PERFORMANCE REPORT

Texas Telecomputer Grid/Bilingual Career Education Demonstration Project

THE WORLD OF WORK: CAREER ORIENTATION FOR ADULTS
EL MUNDO DEL TRABAJO: ORIENTACION VOCACIONAL PARA ADULTOS
COMO OBTENER UN TRABAJO
KEEPING THE JOB
CHOOSING THE JOB
COMO SELECCIONAR UN TRABAJO
COMO MANTENER UN TRABAJO
GETTING THE JOB

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AMERICAN TECHNOLOGICAL UNIVERSITY

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I.O. #26

FINAL REPORT

TEXAS TELECOMPUTER GRID/BILINGUAL
CAREER EDUCATION DEMONSTRATION PROJECT

PROJECT PERFORMANCE REPORT

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Final Project Performance Report

for the

Texas Telecomputer Grid/Bilingual
Career Education Demonstration Project

REPORT ABSTRACT

The primary purpose of the Texas Telecomputer Grid/Bilingual Career Education Demonstration Project was to demonstrate the use of a microwave educational telecommunications system, the Texas Telecomputer Grid, as a communications network for career education. The 1975-76 demonstration project had two main objectives: (1) to demonstrate the flexibility of the Texas Telecomputer Grid as a viable delivery system for conducting effective bilingual career education for adults; and (2) to demonstrate how bilingual career education curricular materials for Spanish-speaking adults may be presented in various communication modes or techniques via the Telecomputer Grid. During the year, 40 professional educators and 10 members of the business and government community participated in the development and implementation of a Career Orientation course entitled The World of Work: Career Orientation for Adults. The project served a total of 218 adult students, of which 113 were Spanish-surnamed.

The Career Orientation course, consisting of fifteen individualized, competency-based modules, was developed and subsequently taught via the Grid to classes in Dallas, San Antonio, and Killeen, Texas. The subject matter for the modules covered the topics of choosing a job, getting the job, and keeping the job. The basic skills of reading, writing, and math computation were integrated with these topical areas.

The Career Orientation written materials were implemented for field testing with five demonstration groups of Spanish-surnamed adults enrolled in 60 clock hours of instruction. Two of the groups were taught by a bilingual instructor; three groups were taught by a two-member monolingual instructional team. Pre- and posttest data were collected to measure cognitive and affective development.

In addition to the pre- and posttests, a series of curriculum assessment instruments were administered during each field-test to assist in learner verification and revision of the materials.

On April 5, 1976, the Career Orientation course via the Texas Telecomputer Grid was implemented in three classes for Spanish-surnamed adults located in Killeen, San Antonio, and Dallas, Texas. Student curricular materials were printed in English and Spanish; audiovisuals were used to illustrate the instruction. The Grid demonstration consisted of 42 hours of instructional and interact time.

Two Spanish-surnamed control groups were identified for the project evaluation study. The first group consisted of twenty students who had been enrolled in English classes in a high school program; the second group consisted of twenty students who had been enrolled in a General Educational Development (GED) program.

The project evaluation studies found that, for Objective 1, the Texas Telecomputer Grid (TTG) was a viable delivery system for bilingual career education. Adult Spanish-speaking students with little mastery of English showed significantly greater achievement in mastering English vocabulary and occupational knowledge than students who did not have access to TTG usage. Use of the TTG did not appear to adversely influence affective development. Students using the Grid and students not using the Grid indicated some affective changes. These changes could not be attributed to the use or the nonuse of the Grid in that the students were volunteers and the two groups differed on age and socioeconomic variables.

For Objective 2, a significant positive relationship between the amount of time spent in using audiovisual materials and student attitudes was found.

Audiovisual presentations that required student reactions, such as written responses and short convergent answers, appeared to be particularly effective in developing positive attitudes in students.

Spontaneous verbal interaction via the TTG was not found to be related to student attitudes or professional ratings of the quality of the presentations. In that one of the unique features of the TTG is its ability to simulate face-to-face communications, further studies of how this feature may or should be used are warranted. The preponderance of educational research, theory, and practice indicates that personal student and teacher exchange is desirable. This development of a warm personal relationship between instructor and student is viewed as particularly important in adult education. However, the project efforts to provide such an atmosphere via the TTG were not substantiated. Indeed, the studies indicated that the professional ratings of effective interaction programming and student attitudes were not congruent. There appears to be a need for intensive research concerning the learning style of adult Spanish-speaking students.

The Career Orientation course was found to enhance reading comprehension significantly in about one-half the instructional time used for a significant increase in reading comprehension via a career-oriented high school diploma program or a high school equivalency program. The results of these demonstrations indicated that the interface of relevant career subject matter with the basic skills was effective in reaching the adult Spanish-speaking student and provided baseline data for further use of the TTG as a career education delivery mode. The studies also indicated that Spanish-speaking adults are educationally unique and that further research concerning this uniqueness is needed.

Results of the study indicate that the course should be implemented and evaluated with Spanish-speaking adults at other locales; that the TTG needs to be applied to other areas of career education; and that these demonstrations have provided baseline data for further studies in bilingual adult career education. The lack of congruence between educator's perceptions and Spanish-speaking adult students' attitudes tends to substantiate this need.

I. MAJOR ACTIVITIES

The primary goal or purpose of the Texas Telecomputer Grid/Bilingual Career Education Demonstration Project was to demonstrate a microwave educational telecommunications system, the Texas Telecomputer Grid (TTG), as a communications network for implementing bilingual career education. A brief description of the TTG is presented as Appendix A.

In order to attain the project goal, the following objectives were established for the project:

1. To demonstrate the flexibility of the Texas Telecomputer Grid as a viable delivery system for conducting bilingual career education.

2. To demonstrate how bilingual career education curricular materials for Spanish-speaking adults may be presented in various communication modes or techniques via the Texas Telecomputer Grid.

Major project activities consisted of developing, implementing, and field testing a bilingual Career Orientation course for Spanish-surnamed adult students. During the fall of 1975 and early 1976, competency-based modular curricular materials for the course were completed in interim form. The course consisted of written materials in modular format (Spanish and English), supported by audiovisual materials developed and/or modified for use with adult students. Beginning in early 1976 and ending in May 1976, the Career Orientation course was field tested with six groups of Spanish-surnamed adults. These groups functioned under various treatment conditions, thus allowing for course and implementation evaluation. Final activities during May and June, 1976, consisted of finalizing and preparing the multimedia, bilingual curricular materials for dissemination.

Thus the Texas Telecomputer Grid/Bilingual Career Education Demonstration Project consisted of a short start-up phase of approximately two weeks and, subsequently, three operational phases. The evaluation phase was conducted concurrently with the operational phases. The major activities of each phase are graphically presented in Figure 1.

Project Start-Up Activities

Selection of the professional staff, staff orientation, and the preparation of detailed operating procedures were the primary tasks accomplished during the first two weeks. The operational phase commenced immediately after the start-up functions were completed.

Board of Directors Meeting

Following the award of the contract for the Texas Telecomputer Grid/Bilingual Career Education Demonstration Project on July 1, 1975, the Board of Directors consisting of the Chancellor and Chairperson of the Board of Regents (ATU), met and made tentative plans for conduct of the project. After the initial meeting, the Project Director proceeded immediately to initiate a plan for action.

Form Career Advisory Board

A Career Advisory Board was selected which consisted of nine professionals who provided information to the Board of Directors and to the Project Director. This committee was composed of professionals who were not only representative of the field of Career Education, but who were also leaders in bilingual education, adult education, and secondary education. (See Appendix B for listing.)

The Advisory Board provided information concerning project activities and validation of course content. Additional areas of support were in locating prospective project personnel and in the presentation of bilingual curricular materials.

Develop Management Plan

A detailed management plan based upon the initial USOE proposal was developed. This management plan was designed to provide the staff with a day-by-day procedure for accomplishment of project objectives. For internal purposes, this plan was operable in three phases. Each phase was concerned with development and implementation of the Career Orientation course for Spanish-surnamed adult students.

An integral part of the management plan consisted of project personnel and responsibilities. Prior to the selection of project personnel a detailed job description was prepared; then project personnel were located to fill the positions.

Select Support Staff

Concurrently with the development of the project management plan, the following staff members were selected to implement the project management plans. Due to this wide range of expertise needed for the project, only two people--the Project Director and Secretary--were employed full-time. The remaining project personnel were part-time.

Dr. T. C. Smith, Project Director, full-time
Dr. Charlotte Smith, Evaluation, part-time
Mr. Richard Butler, Curriculum Writer and Editor, part-time
Mrs. Geraldine Shook, Career Education Consultant, part-time
Mrs. Lee Whitton, Program Coordinator, part-time
Mr. Rudy Calo'oy, Program Consultant and Bilingual Instructor, part-time
Mrs. Avelina Strenio, Bilingual Consultant and Curriculum Writer, part-time
Mrs. Donna Niles, Secretary, full-time
Mrs. Margaret Butler, Typist, part-time

Conduct Staff Orientation

During the two-week start-up period, the Project Director and the Internal Evaluator conducted staff orientation meetings which provided the staff with:

- background information for the project,
- responsibilities for each staff member, and
- a three-phase plan with task completion dates.

Following the two-week orientation start-up, the staff met weekly and at other times considered necessary for project activities.

Make Site Arrangements for TTG Classes

It was during this start-up period that meetings were held between the Director of Telecommunications, Central Texas College (located adjacent to ATU), and selected broadcast and engineering personnel to finalize plans for the use of the Telecomputer Grid facilities and personnel needed to support the development and implementation of the bilingual Career Orientation course.

A schedule for Grid time was prepared and specific personnel in Telecommunications were delegated to work with the Career Orientation project. These personnel met with the staff members for the purpose of learning about the objectives, tentative plans, and nature of the program. A working relationship was established in order to facilitate the flow of information in the planning and development stages.

Locations for the project classes at sites on the Grid were contacted during this period and in the month of December. The Project Director met with representatives of the Dallas Independent School District in Dallas, Texas; the Director of Communications at Fort Hood, Texas; and a representative of Region XX Education Service Center in San Antonio, Texas to discuss plans for implementing the Career Orientation program via the Telecomputer Grid from April 5, through May 14, 1976.

Make Arrangements for TTG Materials and Personnel

Concurrently with arrangements for the Telecomputer Grid services, the project staff coordinated with studio and engineering personnel to determine studio requirements, including furniture and related classroom aids. Also, needs were established for the purchase and preparation of audiovisual tapes, videocassette tapes, and related support materials.

Operational Activities for Phase I

Although conduct of the project was separated into start-up activities and operational activities, the operational activities consumed the major portion of time and effort. All activities during the operation phase related directly to the two project objectives.

The operational description of activities is presented chronologically for each major phase. A step-by-step sequence of events or activities is also shown graphically in Figure 1.

Demonstrations are number coded to the objectives. Demonstrations 1.2 - 1.6 present the Career Orientation course. Demonstration 2.1 concerns using the Grid for implementation of the bilingual Career Orientation course for adult Spanish-surnamed students.

Adapt, Update, and Develop Career Orientation Course Materials

Prior to the demonstration of the Telecomputer Grid as a communications system for implementing career education, well-defined written materials had to be prepared for the bilingual Career Orientation course in both English and Spanish. Career orientation educational materials that related to the low income, minority-group adults were to be searched, adapted, and updated, if available;

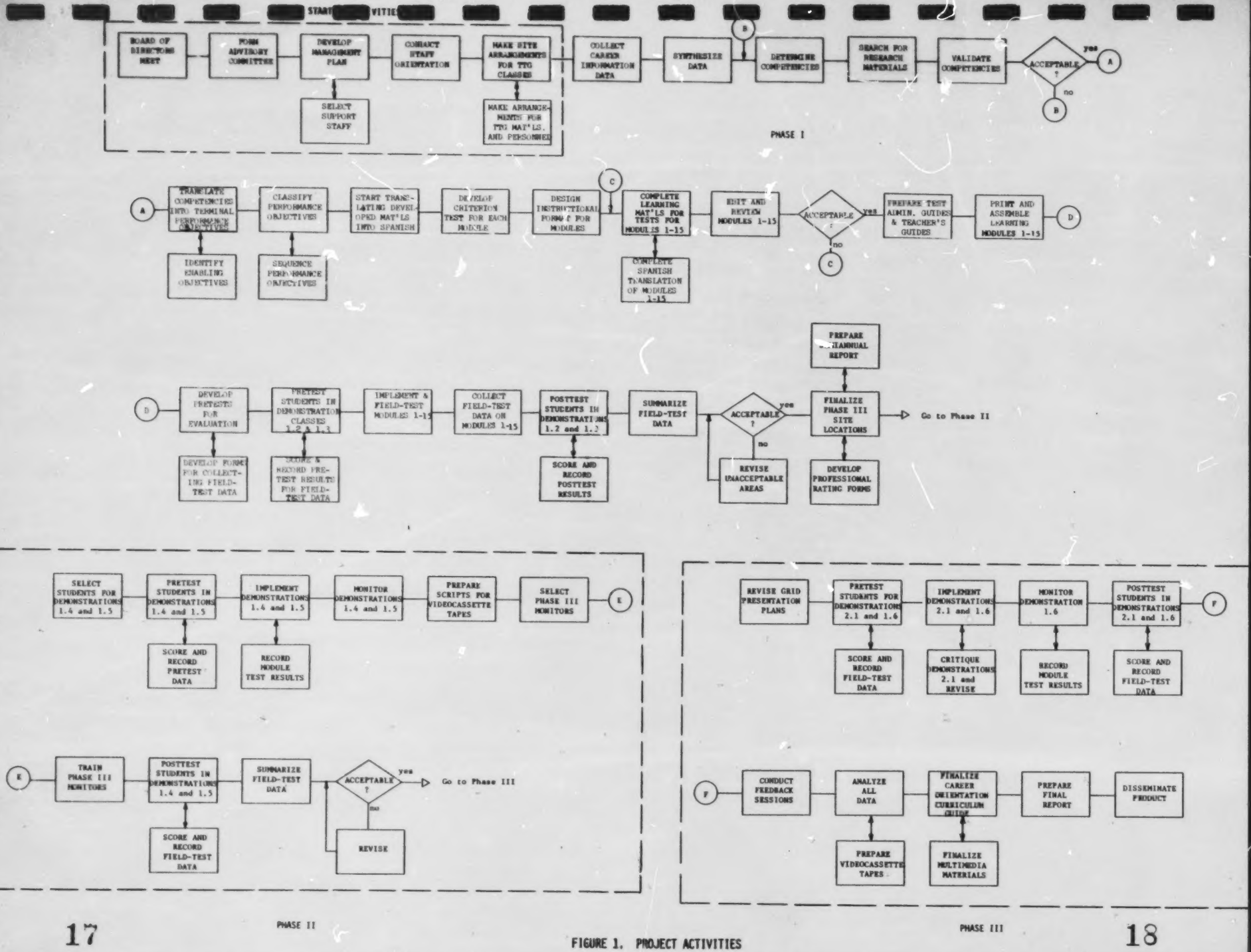
BOARD OF DIRECTORS MEET
FORM ADVISORY COMMITTEE
DEVELOP MANAGEMENT PLAN
SELECT SUPPORT STAFF
CONDUCT STAFF ORIENTATION
MAKE SITE ARRANGEMENTS FOR TTG CLASSES
MAKE ARRANGEMENTS FOR TTG MAT'LS, AND PERSONNEL
COLLECT CAREER INFORMATION DATA
SYNTHESIZE DATA
DETERMINE COMPETENCIES
SEARCH FOR RESEARCH MATERIALS
VALIDATE COMPETENCIES
ACCEPTABLE ?
yes
no
PHASE I
TRANSLATE COMPETENCIES INTO TERMINAL PERFORMANCY OBJECTIVES
IDENTIFY ENABLING OBJECTIVES
CLASSIFY PERFORMANCE OBJECTIVES
SEQUENCE PERFORMANCE OBJECTIVES
START TRANSLATING DEVELOPED MAT'LS INTO SPANISH
DEVELOP CRITERION TEST FOR EACH MODULE
DESIGN INSTRUCTIONAL FORMAT FOR MODULES
COMPLETE LEARNING MAT'LS FOR TESTS FOR MODULES 1-15
COMPLETE SPANISH TRANSLATION OF MODULES 1-15
EDIT AND REVIEW MODULES 1-15
ACCEPTABLE ?
PREPARE TEST ADMIN. GUIDES & TEACHER'S GUIDES
PRINT AND ASSEMBLE LEARNING MODULES 1-15
DEVELOP PRETESTS FOR EVALUATION
DEVELOP FORMS FOR COLLECTING FIELD-TEST DATA
PRETEST STUDENTS IN DEMONSTRATION CLASSES 1.2 & 1.3
SCORE & RECORD PRE-TEST RESULTS FOR FIELD-TEST DATA
IMPLEMENT & FIELD-TEST MODULES 1-15
COLLECT FIELD-TEST DATA ON MODULES 1-15
POSTTEST STUDENTS IN DEMONSTRATIONS 1.2 and 1.3
SCORE AND RECORD POSTTEST RESULTS
SUMMARIZE FIELD-TEST DATA
ACCEPTABLE ?
REVISE UNACCEPTABLE AREAS
PREPARE BIANNUAL REPORT
FINALIZE PHASE III SITE LOCATIONS
DEVELOP PROFESSIONAL RATING FORMS
Go to Phase II
SELECT STUDENTS FOR DEMONSTRATIONS 1.4 and 1.5
PRETEST STUDENTS IN DEMONSTRATIONS 1.4 and 1.5
SCORE AND RECORD PRETEST DATA
IMPLEMENT DEMONSTRATIONS 1.4 and 1.5
RECORD MODULE TEST RESULTS
MONITOR DEMONSTRATIONS 1.4 and 1.5
PREPARE SCRIPTS FOR VIDEOCASSETTE TAPES
SELECT PHASE III MONITORS
TRAIN PHASE III MONITORS
POSTTEST STUDENTS IN DEMONSTRATIONS 1.4 and 1.5
SCORE AND RECORD FIELD-TEST DATA
SUMMARIZE FIELD-TEST DATA
ACCEPTABLE ?
REVISE
Go to Phase III
PHASE II
REVISE GRID PRESENTATION PLANS
PRETEST STUDENTS FOR DEMONSTRATIONS 2.1 and 1.6
SCORE AND RECORD FIELD-TEST DATA
IMPLEMENT DEMONSTRATIONS 2.1 and 1.6
CRITIQUE DEMONSTRATIONS 2.1 and REVISE
MONITOR DEMONSTRATION 1.6
RECORD MODULE TEST RESULTS
POSTTEST STUDENTS IN DEMONSTRATIONS 2.1 and 1.6
SCORE AND RECORD FIELD-TEST DATA
CONDUCT FEEDBACK SESSIONS
ANALYZE ALL DATA
PREPARE VIDEOCASSETTE TAPES
FINALIZE CAREER ORIENTATION CURRICULUM GUIDE
FINALIZE MULTIMEDIA MATERIALS
PREPARE FINAL REPORT
DISSEMINATE PRODUCT
PHASE III

FIGURE 1. PROJECT ACTIVITIES

if not available they were to be developed. The areas covered by the bilingual Career Orientation course, which was developed for demonstration via the Grid, were determined as those very crucial to the Spanish-surnamed adult.

The following sequence of activities delineates the precise activities utilized in development of the bilingual Career Orientation course.

Collect Data for Course

The background information for the bilingual Career Orientation course was taken primarily from the Adult Performance Level (APL) Project, conducted by the Division of Extension of the University of Texas at Austin and funded through the Texas Education Agency by the USOE, Division of Adult Education Programs. This initial study produced or accomplished the following in relation to adult functional competency in the United States:

- Developed and validated a series of performance statements or competencies which comprise adult functional competency
- Conducted a series of national assessments of performance of adults with respect to these performance statements or competencies
- Created, as a by-product of the research, a prototype test of adult functional competency.

The nationally validated set of competencies were grouped into the following five areas:

- Occupational Knowledge
- Consumer Economics
- Government and Law
- Health
- Community Resources

A second study, funded by the Office of the Governor, Division of Planning Coordination, and the Texas Education Agency to conduct a survey of functional adult competency in the State of Texas, was also used as a reference.

This study yielded a comparison of the functional literacy between Texas adults and the population at large.

Data and curricular materials based upon the national APL study were also obtained from the Vocational and Adult Education Department, Auburn University, and the Alabama State Department of Education.

These sources yielded the baseline information with which to proceed with course development. After collecting the validated competencies, the project staff attended a three-day workshop conducted by the APL staff of the Extension Division of the University of Texas at Austin. Additional data and information were obtained for possible inclusion in the Career Orientation course. Educators from Texas, Oklahoma, Louisiana, Arkansas, and New Mexico were present at the workshop. The materials that the APL project had developed were designed only for the English-speaking adult; however, this data has served as a valid basis for determining the competencies in the bilingual Career Orientation course.

Synthesize Data

The University of Texas research team presented ten (10) competencies or performance statements for the Occupational Knowledge area. These ten competencies are as follows:

1. To build an oral and written vocabulary related to occupational knowledge
2. To identify sources of information
3. To define occupational categories
4. To be aware of vocational testing and counseling
5. To understand differences among commercial employment agencies
6. To prepare for job applications and interviews
7. To know standards of behavior
8. To know attributes and skills which may lead to promotion

9. To know the financial and legal aspects of employment

10. To understand aspects of employment other than financial.

For each competency the University of Texas group had also prepared a scope and sequence chart which delineated the skills of reading, writing, speaking, listening, viewing, problem solving, interpersonal relations, and computation. The Alabama project structured Career Education for Adults on the original nine competencies of the APL research.

Although there was previous research which validated the competencies necessary for functional literacy in occupational knowledge, the process of adapting research to curricular materials was a primary concern of the project staff. After local concerns were considered, the ten APL competencies were organized and some were restated.

Determine Competencies

The bilingual Career Orientation course was divided into three knowledge areas: Choosing a Job, Getting the Job, and Keeping the Job.

The curriculum development staff adapted the basic APL content requirements for the area of occupational knowledge and proceeded to develop competency statements to meet the established behaviors that a Spanish-surnamed adult student should acquire. Competency statements are subsets of behavior which are referred to as principles, skills, and concepts. They are precisely stated for clarity. The competency statements are presented below, by area.

CHOOSING A JOB

Competency 0	Identifies the parts of a competency-based module of study in order to progress at individual rate.
Competency 1	Communicates thoughts and feelings about past or present jobs to increase self-awareness of job experiences.
Competency 2	Defines job clusters by describing the types of jobs, job requirements, earnings, and future employment opportunities within each cluster in order to have more information for selecting a job.

Competency 3 Selects jobs of interest from a cluster to identify requirements of entry levels and succeeding levels in order to compare job level requirements with personal qualifications.

Competency 4 Identifies desirable standards of behavior and attitudes common to all jobs to increase awareness of appropriate on-the-job behavior.

Competency 5 Recognizes the usefulness of personal inventories to increase self-awareness for career planning.

Competency 6 Locates selected job occupations in various industries to make changing jobs easier.

GETTING THE JOB

Competency 7 Identifies the sources of information which can lead to employment and uses the information to locate job opportunities.

Competency 8 Writes letters of application to contact prospective employers.

Competency 9 Fills out job application forms accurately and completely to satisfy pre-employment requirements.

Competency 10 Writes a résumé to present information for an employer's review.

Competency 11 Interviews with possible employers to exchange information about the applicant's qualifications and the job's requirements.

KEEPING THE JOB

Competency 12 Demonstrates knowledge skills related to the legal aspects of employment.

Competency 13 Demonstrates knowledge skills related to the financial aspects of employment.

Competency 14 Demonstrates awareness of worker traits and skills which may lead to promotion.

Competency 15 Demonstrates knowledge of aspects of employment in addition to financial which could affect job satisfaction.

Search for Research Materials

Once the basic ten APL performance statements or competency statements were reorganized and restated (in this case into fifteen statements) for the bilingual Career Orientation course, the process of searching and reviewing curricular materials began. The project staff has reviewed materials from the following sources:

- State Departments of Education
- Federally funded projects
- Individual Schools and School Districts
- Vendors of Instructional Materials
- Department of Labor.

Validate Competencies

After studying, analyzing, and rewriting the original APL competency statements, the Bilingual Career Education Demonstration Project staff revalidated the fifteen competencies. Instructors, students, project staff, consultants, and members of the Advisory Board revalidated the course competencies by comparing the fifteen with the initial ten.

Translate Competencies into Terminal Performance Objectives

With the competency statements validated, the Terminal Performance Objectives were then developed. The objectives specify the student behaviors, the conditions under which the student is expected to work, and the criteria of acceptance for the behaviors.

The competency statements, as validated by professionals in the field, provided the guidance for writing terminal performance objectives. This ensured that the objective conformed to the performance the student would be expected to demonstrate outside the school environment. Terminal performance objectives

specified the student behaviors expected as a result of learning activities or experiences, the conditions under which the student is expected to work or demonstrate the desired behavior, and the criteria of acceptance for the demonstrated behavior. The terminal performance objective then became the mechanism whereby a student could demonstrate that he or she had mastered the content identified through task analysis. Thus, the performance objective was the center of the learning and teaching process. The objectives not only defined test situations but structured the learning modules in the course. The next step to logically occur in the development of the Career Orientation course was to write enabling objectives for each of the fifteen terminal performance objectives.

Identify Enabling Objectives

The project staff endeavored to construct the enabling objectives for each competency in small increments, leading the student in detail from the simple to the more complex performance. Furthermore, an objective may have several purposes--teaching and reinforcing the skills of reading, writing, problem solving, speaking, listening, viewing, interpersonal relations, and computation as they apply to the occupational knowledge problem. Determination of the level of vocabulary and language arts skills suitable for structuring terminal performance objectives was based on information gained from (1) the Texas APL study, and (2) reading scores on record of the Spanish-surnamed adult students who had attended the American Preparatory Institute, an adult high school located adjacent to American Technological University in Killeen, Texas. The APL study showed that of 16 responses in the Occupational Knowledge Assessment Test, Chicanos scored the lowest of four ethnic groups on 13 responses. Three of the responses required reading skills; one required writing; three required computational work; and three required some problem-solving activity.

Classify Performance Objectives

In analyzing the level of the terminal performance objectives and enabling objectives, the project staff classified each objective to ensure that all objectives are not written at the same level. A simplified checklist based upon Bloom's Taxonomy was used.

Sequence Performance Objectives

Concurrently with classifying the objectives, the enabling objectives were sequenced from the lowest level to the highest level (terminal performance objective level). The staff found that this procedure enabled them to task-analyze the terminal behavior(s) into component parts that were suitable for developing learning activities in small increments suitable for the adult student.

Start Translating Developed Materials into Spanish

The bilingual project staff started translating competency statements, terminal performance objectives, and enabling objectives as soon as the curriculum writers completed their writing tasks. This procedure has been followed throughout course development.

The task of translating the modules as they went through the development stages was being performed by three people: one moved from Mexico to Texas as a small child, was educated in South Texas, and taught bilingual adult classes in the U.S. Army and in civilian schools; another was from the Dominican Republic, graduated from Texas A & M University in Vocational Education, and taught in a public school in South Texas; the third translator was from Spain and taught Spanish at Central Texas College, Killeen, Texas. As each step in the development of the program was finalized, translation to Spanish was initiated. For example, when the competency statements were finalized, they were translated; and when the terminal performance objectives were completed, they too were translated.

Develop Criterion Test for Each Module

Upon completion of each terminal performance objective and set of enabling objectives a criterion posttest was developed for each terminal performance objective; therefore, fifteen criterion tests were developed for this course. Directions for both student and teacher were included in the tests. Each criterion test was based upon the criteria of acceptance for each terminal performance objective. See Appendix C for a sample of a criterion test as a part of the instructional module.

Design Instructional Format for Modules

The next step in the process was to design a format for the instructional modules. The staff determined that the format for each module would be designed as follows:

Student Learning Modules

A. Overview - Tells the student what information and skills the module is designed to provide as well as the types of learning activities, and what the student will be able to do on completion; it also states the justification for learning the content--its relevance and purpose.

B. Terminal Performance Objective--Gives the performance statement, the conditions and/or limitations, and the criteria of acceptance.

C. Pretest Instructions--Instructs the student to challenge the objective if he or she feels that the criteria of acceptance is attainable without additional preparation.

D. Enabling Objectives--List, in order of increasing difficulty, those objectives (behaviors) that must be mastered to enable the student to successfully complete the terminal performance objective. Enabling objectives are the small increments of learning that are necessary in order to be able to demonstrate the performance stated in the terminal performance objective.

For each terminal performance objective a set of enabling objectives was written. Enabling objectives are not as detailed as terminal performance objectives. Their function is to serve as a guide for developing learning activities, and as an interim evaluation of student progress.

E. Learning Activities--Direct the students to what they must do, how they must do it, and where to proceed upon completion of an activity. Learning activities include a wide range of activities, thus allowing for differences in learner characteristics. The learning activities are structured to maximize student self-direction. The range of experiences presented in the activities may make reference to assignment sheets, worksheets, books, charts, audiovisual materials, or self-assessment exercises. The activities are written to take advantage of and utilize all available audiovisual materials, references, and resources within each program.

F. Learning Resources--Are the references needed to accomplish each of the learning activities and to fulfill the requirements of the performance objectives. They include resource materials that have been developed by the curriculum writers, as well as other learning resources such as books, pamphlets, and audiovisual aids. A listing of references is provided so that the student is guided toward using the multiple resources that should be available in a classroom or resource center. Channeling students toward using multiple references builds the foundation for conducting independent research required of students as they continue their education or perform on the job in their chosen careers.

A listing of supplies and materials is presented so that students may incorporate them into their learning activities. The learning activities direct

each student to this list in order to obtain the specific resources, supplies, or materials needed to accomplish a task.

The five parts listed above are the component parts of each student learning module. These modules were bound together in three volumes: (1) Choosing a Job, (2) Getting the Job, and (3) Keeping the Job.

The worksheets and self-assessments are consumable and are designed to be placed in an accessible file in a classroom for student use.

Teacher Materials

Teacher materials for field testing consisted of a looseleaf teacher's manual which contained one set of each of the above materials for each module, plus:

A. An introduction to the course, explaining the rationale for the course and suggestions for using the modules.

B. A teacher's guide for each module, giving directions to the teacher and listing the references, supplies, and equipment needed.

C. A test administration guide for each pretest and posttest, listing the equipment and materials needed, references, time limit, instructions, evaluation, criteria of acceptance, and the answer key for the test.

D. A criterion test for each module, administered to each student individually by the instructor as he or she met the requirements for being tested.

E. Answer keys for the worksheets, self-assessments, and criterion tests.

Preparation of Curriculum Guide and Support Materials

With the competency statements, terminal performance objectives, enabling objectives, criterion tests, and the module format completed, the writing of the learning activities, resource sheets, and related materials, such as information sheets, followed.

The learning activities included a wide range of learning experiences, thus allowing for differences in learner characteristics. The learning activities were structured to maximize student self-direction. They directed the student to multiple resources that were available in the classroom in the form of books, pamphlets, assignment sheets, worksheets, charts, and audio-visual resources. Although several publishers have produced occupational knowledge resource materials recently, few of these materials are suitable in their entirety for the adult bilingual person. Therefore, many of the learning resources were written by the members of the staff.

Concurrently with the development of the modules the bilingual staff translated the materials into Spanish.

The first six modules, Choosing a Job, were completed, assembled, and ready for the classroom on January 12--the first day of class for Demonstrations 1.2 and 1.3. The second set of modules, Getting the Job, was completed and was scheduled for the demonstration classrooms on January 26, 1976. The third set, Keeping the Job, was scheduled for the classrooms on February 5, 1976. The instructional modules were reviewed by the project staff and then prepared for printing for initial field-testing.

Prepare Test Administration Guides and Teacher's Guides

The Teacher's Guides and Test Administration Guides were completed for instructor use. The guides consisted of the components listed previously in items B and C under "Teacher Materials."

Develop Pretests (and Posttests) for Evaluation

Three instruments were selected for pretreatment and posttreatment measures. These tests were the Occupational Knowledge Assessment, Attitudes Toward Education and Careers, and the California Achievement Test, Vocabulary and Reading Comprehension Subtests, Level 4. For the detail of each test, refer to the Evaluation section under "Instrumentation."

Develop Forms for Collecting Field-Test Data

Concurrently with the development and/or selection of measurement instruments, three instruments were chosen to assess the curricular materials used in the bilingual Career Orientation course. These instruments are (1) Criterion-Referenced Posttests, (2) Module Evaluation Forms, and (3) Professional Rating Forms. A description of each is presented in the Evaluation section under "Curriculum Assessment Instruments."

Pretest Students in Demonstration Classes 1.2 and 1.3

When the initial draft of the first six learning modules for the Career Orientation course had been completed, field-testing of the learning modules began. As additional modules were completed, they were included in the initial field-testing. This Phase I field-testing is described in the Evaluation section.

Score and Record Pretest Results for Field-Test Data

The activities for scoring the measurement instruments (pretest data) are discussed in the Evaluation section.

Implement and Field-Test Modules

The curricular materials were implemented by a monolingual instructor with eleven students (Demonstration 1.3) and by a bilingual instructor with eight students (Demonstration 1.2). Both instructors had previously participated in the development of the materials. Concurrently with this field-testing, the modules were being revised and refined. The population of students for Demonstrations 1.2 and 1.3 is discussed in the Evaluation section.

Collect Field-Test Data on Modules

The activities for curriculum assessment data are presented in the "Evaluation" section. The procedures for evaluating all modules were the

same. As the module evaluation forms were submitted to the curriculum development staff, revisions were made according to the needs reported. A module evaluation form was submitted when all students in a class had completed the learning module. Posttests were administered after the completion of approximately 60 instructional hours.

Summarize Field-Test Data

At the close of the first implementation of the Career Orientation course, all student data and instructor evaluations were summarized. This summary was analyzed by the project staff and several modifications of worksheets and tests were made. On the basis of instructor and student feedback, plans were made not to confine the second field-testing to just Spanish-surnamed students.

Phase I Completion

Three activities were simultaneously conducted at the close of Phase I operations. A comprehensive summary of the first six months of project operations was prepared as a semiannual report. This report was submitted to the Office of Career Education. Finalization of arrangements to use the Skyline Career Development Center in Dallas, Texas, and the Education Service Center, Region XX, in San Antonio, the latter in cooperation with the Bexar County Adult Continuing Education program, as remote sites was made. The third final activity was to modify the Professional Rating Form for use as a measurement instrument for educators' attitudes.

Operational Activities for Phase II

Second Field-Testing of the Career Orientation Course

During the time period of February 23 through April 2, 1976, the

revised Career Orientation course was field tested in two demonstrations. Demonstration 1.4 was taught by a bilingual instructor; concurrently, Demonstration 1.5 was implemented by two monolingual instructors using bilingual materials. A description of these demonstrations is presented in the Evaluation section.

Preparation of Materials for Telecomputer Grid

Slides and videocassettes were developed, where necessary, and expanded in other cases to supplement existing material for the course. These materials were used as a part of the demonstration project. After these audiovisual materials were tested during the project, they became a part of the existing library for the Telecomputer Grid located at ATU in Killeen, Texas. In addition, these materials are available to other users who are implementing career education programs for the Spanish-speaking adult.

Although preparation of audiovisuals was primarily an activity for the last half of the year, initial steps were taken for scripting materials to be presented via the Telecomputer Grid in Demonstration 2.1 during December, 1975.

Phase III Monitors

Once the specific sites for the Phase III Grid demonstration were selected, five site monitors were selected. These monitors were:

Mrs. Josephine Aviña, San Antonio

Mrs. Elsie Figueroa, Dallas

Mr. Michael J. Kaufman, Dallas

Mrs. Elva Montgomery, Killeen

Mr. Rudy Calo'oy, Killeen

Two monitors were assigned to Dallas and two to Killeen. This sharing of responsibilities was necessary because of previous commitments of the monitors and because of the Grid presentation schedule.

Monitor Training

Members of the project staff conducted a one-day training session for the monitors at each site. The training consisted of a project overview, demonstrations of the Career Orientation procedures, and an explanation of procedures for collecting field-test data. Additional assistance was provided the monitors via the Telecomputer Grid during predemonstration Grid tests.

Field-Test Data

After approximately sixty instructional hours, posttests for the evaluation of the course were administered to the students participating in Demonstrations 1.4 and 1.5. Specific details concerning the field-test data are presented in the Evaluation section. The field-test data were summarized and reviewed by the staff. Only a few minor changes were made.

Operational Activities for Phase III

Review Grid Presentation Plans

The training sessions with the Phase III monitors indicated that the English mastery level of the students in Dallas and San Antonio was less advanced than the level that had been prepared for. Presentation plans during Phase II were modified to include more emphasis on English vocabulary and attitudinal development than writing skills.

Third Field-Testing, Demonstrations 2.1 and 1.6

The third field testing of the Career Orientation course was conducted from April 5 through May 21, 1976. A description of this testing is presented in the Evaluation section.

Feedback Sessions

At the close of the Phase III demonstrations the Project Director, the Internal Evaluator, and the External Evaluator met with the project personnel

assigned to San Antonio and to Dallas. During these sessions, the personnel exchanged their opinions, evaluations, and recommendations concerning Demonstration 2.1 and the curricular materials. These feedback sessions indicated the following:

1. The most appropriate level for the use of the course was a reading level of about seventh or eighth grade.
2. Although the students did adjust to the Grid environment more quickly and easily than expected, it is necessary to provide time for the adjustment. For Mexican-American adults, the time should be spent in establishing warm, interpersonal relationships. Immediate mastery of all student names and personal details about each student by the instructor is important.
3. Often the Mexican-American adult had little difficulty in comprehending conversational English; however, time must be provided for the student to comprehend the English, translate to Spanish, formulate the Spanish response, and then translate to English. Thus, programming must be at a relatively slow pace.

Analysis of Data

Analysis of data was conducted by the internal evaluator. The external evaluator examined all project data, reviewed all analysis techniques to be used, and reviewed several analyses from master data sheet through final presentation of the results. Results of the external audit are presented in Appendix K. The analysis of data and results are presented as "Product Evaluation."

Prepare Videocassette Tapes

Concurrently with the analysis of data, the videocassette tapes of each Grid presentation were critiqued. The tapes were then edited for use as multimedia learning activities for the course.

Finalize Career Orientation Materials and Report

The final activities of the project consisted of review and critiques of the project-developed products and the final report. Consultants were employed to provide the staff with this evaluation function. The consultants' recommendations were then followed as a guide for final revisions.

Project Dissemination

Dissemination activities were conducted throughout the twelve months of project operations. However, since the demonstration project had as a major task the development of bilingual adult career education materials, major dissemination activities concerning the products of the project will take place during 1976-1977.

Summary

A summary of the major activities for the project, including the time schedule for activities, is presented in list form on the following pages.

PHASE I

DEVELOPMENT & IMPLEMENTATION

	Activities	Schedules
1.	Complete Terminal Performance Objectives	8/1/75 - 11/5/75
2.	Complete Enabling Objectives	9/1/75 - 11/30/75
3.	Complete Learning Activities and Module Tests: Nos. 1-5	10/1/75 - 1/12/76
4.	Complete Learning Activities and Module Tests: Nos. 6-12	11/1/75 - 1/20/76
5.	Complete Learning Activities and Module Tests: Nos. 13-16	12/1/75 - 2/5/76
6.	Material Search	8/1/75 - 2/1/76
7.	Develop Professional Rating Form	12/1/75 - 1/5/76
8.	Develop Occupational Knowledge Assessment (OKA) Test	12/1/75 - 1/12/76
9.	Develop Attitudes Toward Education and Careers (AEC) Test	11/15/75 - 1/12/76
10.	Select Participants for Demonstrations 1.2 and 1.3	1/12/76
11.	Administer CAT Pretest	1/13/76
12.	Score and Record CAT Pretest	1/13/76
13.	Administer OKA and AEC Pretests	1/14/76
14.	Score and Record OKA and AEC	1/15/76
15.	Administer CAT, OKA, AEC Posttests	2/20/76
16.	Score and Record Posttests	2/21/76
17.	Record Module Test Results	2/21/76
18.	Prepare Semiannual Report	1/5/76 - 1/30/76
19.	Finalize Phase III Site Locations	12/19/75
20.	Develop Professional Rating Form	1/12/76

PHASE II

DEVELOPMENT & IMPLEMENTATION

	Activities	Schedules
1.	Select Participants for Demonstrations 1.4 and 1.5	2/16/76 - 2/23/76
2.	Administer CAT Pretest: Demonstrations 1.4 and 1.5	2/23/76
3.	Score and Record CAT Pretest	2/23/76
4.	Administer OKA and AEC Pretests	2/24/76
5.	Score and Record OKA and AEC	2/25/76
6.	Administer CAT, OKA, AEC Posttests	4/2/76
7.	Score and Record Posttests	4/3/76
8.	Record Module Test Results	4/3/76
9.	Prepare Scripts for Video Tapes: Modules 1-5	1/12/76 - 2/16/76
10.	Prepare Scripts for Video Tapes: Modules 6-12	1/20/76 - 3/1/76
11.	Prepare Scripts for Video Tapes: Modules 13-16	2/5/76 - 3/15/76
12.	Select Phase III Monitors	2/23/76
13.	Train Phase III Monitors, On-Site	3/26/76 and 3/29/76

PHASE III

DEVELOPMENT & IMPLEMENTATION

	Activities	Schedules
1.	Select Participants for Demonstration 1.6 and Demonstration 2.1	3/20/76 - 4/5/76
2.	Administer CAT Pretest: Demonstrations 1.6 and 2.1	3/20/76 - 4/5/76
3.	Score and Record CAT Pretest	3/20/76 - 4/5/76
4.	Administer OKA and AEC Pretests	4/5/76 - 4/6/76
5.	Score and Record OKA and AEC	4/6/76 - 4/13/76
6.	Administer CAT, OKA, AEC Posttests	5/17/76 - 5/20/76
7.	Score and Record Posttests	5/21/76
8.	Record Module Test Results	5/21/76
9.	Conduct Feedback Sessions	5/26/76 and 6/14/76
10.	Analyze All Data	5/21/76 - 7/30/76
11.	Prepare Videocassette Tapes	5/26/76 - 8/30/76
12.	Finalize Bilingual Career Education Curriculum Guide for Career Orientation	5/26/76 - 8/30/76
13.	Finalize Multimedia Materials	5/26/76 - 8/30/76
14.	Prepare Final Report	5/26/76 - 8/30/76
15.	Conduct Project Dissemination Activities	9/14/75 - 8/30/76

II. PRODUCT EVALUATION

Purpose

The purpose of the Texas Telecomputer Grid/Bilingual Career Education Demonstration Project was to demonstrate a communication system for bilingual career education. This communication system was the Texas Telecomputer Grid. Appendix A contains a brief description of the system. The system was demonstrated by serving Spanish-speaking, limited English-speaking adults in three locations within Texas with an educational program addressed to their specific and unique career development needs.

Project Objectives

The project had two major product-oriented objectives. The first objective was to demonstrate the flexibility of the Texas Telecomputer Grid (TTG) as a viable delivery system for bilingual career education. In the very simplest terms the TTG may be considered as a vehicle to transmit televised programs, computerized information, and face-to-face conversations without use of such supports as telephones for audio communications. The flexibility of such a transmittal system was demonstrated by using the TTG to simultaneously conduct an individualized, continuous-progress course at several sites.

The second objective of the project was to demonstrate how bilingual career education curricular materials for Spanish-speaking adults could be presented in various communication modes or techniques via the TTG. The major communication modes or variables to be demonstrated were instructor-student spontaneous interaction and use of audiovisual materials.

For the purpose of evaluation, these product objectives were translated into the following research questions:

Objective 1

A. In the context of occupational knowledge and basic skills, is there a difference in the cognitive development of bilingual adult students having the TTG as an instructional medium and bilingual adult students not having access to the TTG?

B. Is there a difference in the affective development toward careers and education of bilingual adult students having the TTG as an instructional medium and bilingual adult students not having access to the TTG?

Objective 2

A. Is there a relationship between the amount of spontaneous interaction during TTG usage and bilingual adult students' attitudes toward selected career development aspects?

B. Is there a relationship between the amount of audiovisual material usage and bilingual adult students' attitudes toward selected career development aspects?

C. Is there a relationship between the amount of spontaneous interaction during TTG usage and professional ratings of TTG usage?

D. Is there a relationship between the amount of audiovisual material usage and professional ratings of TTG usage?

Operational Definitions

Due to the innovative nature of the demonstration project, which interfaced a technologically advanced communication system with meeting the educational needs of a culturally unique, minimally served population, it was imperative that operational definitions be formulated to ensure concise communication of the project's endeavors.

These definitions are presented in the following paragraphs.

1. Cognitive Development was defined to be the change during a period of time in occupational knowledge and English reading vocabulary as measured by the Occupational Knowledge Assessment Test and the California Achievement Tests, Level IV, vocabulary subtest.

2. Affective Development was defined to be the change during a period of time in reactions toward general aspects of education and connotative meanings of selected career-related terms, as measured by the Education Scale Inventory and a semantic differential consisting of six terms with three factors and nine scales per factor.

3. Interaction was delimited to verbal interaction due to the difficulty in ascertaining observable evidence of other forms of interaction. Interaction was further delimited to consist of relatively divergent, sustained student verbalization as measured by a time sampling of teacher talk versus student talk.

4. Attitudes, as a term, was differentiated from affective development by defining it as single reactions to statements, where the reactions indicate intensity of agreement or disagreement with the statements, whereas the term affective development implies change in reaction.

Methodology - Data Collection

The basic evaluation design used for product evaluation was a nonequivalent control group design since random assignment from a common population was not possible for the TTG treatment (Campbell and Stanley, 1963). This design, while not providing the clarity of interpretation provided by use of a true experimental pretest-posttest control design, does provide control over such sources of invalidity as history, maturation, testing instrumentation, selection, and mortality. Although use of the design does limit generalization, since external

sources of invalidity are not controlled, such limitations are also common to its experimental design equivalent.

This evaluation design was employed three times. The project conducted two implementations of the Career Orientation course prior to the implementation of the course via the TTG. For each of these two field-test implementations a control or comparison group was identified.

To provide further data concerning the effects of the course, two additional control groups of adult students were included in the data analyses. Thus, eight mutually-exclusive groups of adult students were enrolled as part of project evaluation efforts.

Sampling Procedures

The sampling procedures used to select project participants varied with the time period within which the sampling took place. This variance in procedures was necessary because relatively precise selection procedures for the two field-test implementations at the project site could be effected, while the implementation at remote sites could not effectively use such procedures. The participant selection procedures used are presented by phase, with Phases I, II, III, and Control indicating the time period of the sampling.

Phase I. Phase I field-testing consisted of two demonstration groups. Demonstration 1.2 group (N=8) was enrolled in the Career Orientation course and was taught by a bilingual instructor. Demonstration 1.3 group (N=11) was also enrolled in the Career Orientation course but was taught by a monolingual instructor. Both groups used the same individualized, continuous-progress learning modules.

The Phase I participants were randomly selected by using the following procedures. A listing was made of all Spanish-surnamed students enrolled in the American Preparatory Institute's (API) Cycle JH16 which began January 12, 1976 and ended February 20, 1976. These students were then randomly assigned to one of the demonstration groups.

During this cycle several non-Spanish-speaking students expressed a desire to take the course and were allowed to do so. The field-test data from this group was used for developmental purposes.

Phase II. Phase II field-testing also consisted of two groups. Demonstration 1.4 group (N=21) was taught by a bilingual instructor. Demonstration 1.5 group (Spanish-surname N=5) was taught by a two-member monolingual instructional team. A change in the selection procedures of Phase I was made for Phase II selection. During Phase I the students indicated that they preferred to remain in the regular classroom structure rather than be segregated into a Spanish-surnamed class. Therefore, since this regular classroom structure consisted of a team-teaching situation with each student selecting the course (or set of modules) to be studied, Demonstration 1.5 followed the regular structure. The Demonstration 1.5 participants consisted of those Spanish-surnamed students who selected the Career Orientation modules on the first two days of the cycle and who therefore were pretested. However, to maintain continuity of field-testing, Demonstration 1.4 group was moved to another site and selection procedures for this group followed those of Phase I, with randomization being between placement in the Career Orientation class or the regular API program.

Phase III. The Phase III implementation consisted of two demonstration groups. Demonstration 2.1 (N=20) was composed of four API students in Killeen, nine adult English-as-a-Second-Language students in San Antonio and seven Spanish-surnamed students in Dallas. This group received their instruction as a class

by use of the TTG. Demonstration 1.6 group (N=14) was enrolled in the Career Orientation course in the same manner as Demonstration 1.4 and had a bilingual instructor.

The project staff experienced some difficulty in selection of Demonstration 2.1 participants. In order to have access to three TTG studios at the same time, Demonstration 2.1 sessions were scheduled for three nights a week from 7:30 till 9:00. Although this somewhat paralleled the regular instructional sessions for adult education classes in Dallas and San Antonio, it did not parallel the daily, daytime class schedule for Killeen. Therefore, all participants in Demonstration 2.1 were volunteers who could adjust their time schedules and make transportation arrangements to attend the sessions at the three studios. This sampling procedure resulted in a Demonstration 2.1 group which was not representative of the other demonstration groups.

Control. Two control groups were identified for the project evaluation study. The first control group (HS Control) consisted of twenty Spanish-surnamed students that had participated in the regular API high school program during the time period of June, 1975 to May, 1976. The second control group (GED Control) consisted of twenty Spanish-surnamed students who participated in the API General Educational Development (GED) program during the time period of June, 1975 to May, 1976.

Because during Phase II all API high school students at one site had access to enrollment in the Career Orientation course, HS Control participants were selected from the roster of students at a site which did not offer the course to all students. All HS Control students had participated in twelve-week instructional cycles rather than the six-week instructional cycle for project implementations.

The GED Control participants were selected from the roster of API students enrolled in cycles at an API site where GED students studied in separate classrooms from high school students. These students had participated in six-week instructional cycles.

The API ongoing evaluation design consists of all students being administered precycle achievement tests; however, postcycle achievement testing is done by random selection of sixty students. Therefore, the HS Control and GED Control groups which were exhaustive of all Spanish-surnamed students involved in both pre- and postcycle testing for each respective site, may be considered as representative of their respective API populations.

Description of Participants

A total of 218 adults who had not received a high school diploma or its equivalent participated in the Career Orientation course during the project's operation. The project study data represent 74% of this population. Phase I and II mortality effects may be attributed to early course completions by students that were exceptionally motivated and/or academically advanced with respect to the samples. Phase III mortality effects varied according to site. In San Antonio several participants felt that the course was too difficult for their limited command of English and therefore did not continue in the project. At the Killeen site some students felt that the expanded time period did not allow for as rapid a rate of progress as their educational program plans required; they therefore returned to the relatively intensive API schedule. Mortality at the Dallas site appeared to be for a variety of reasons. However, the 26% mortality rate may be considered relatively small when compared with the traditional 50% mortality rate usually expected in adult education programs. Table 1 presents the number of initial enrollees per cycle and the number of participants represented in the analyses of data.

TABLE 1

Enrollment versus Completion Rate

by Phase

Phase	Enrollment			Pre-Post Scores			% Enrollment Providing Pre-Post Data		
	Number English Surnamed	Number Spanish Surnamed	Total	Number English Surnamed	Number Spanish Surnamed	Total	English Surname	Spanish Surname	Total
I	9	19	28	---	11	11	0	.58	.39
II	57	35	92	46	28	74	.81	.80	.80
III	47	51	98	40	37	77	.85	.73	.79
Total	113	105	218	86	76	162	.76	.72	.74

Descriptive data for the eight groups of students participating in the evaluation study are presented in Table 2. Of the 111 participants with pretreatment descriptive data, only 11 were female. The mean age for seven of the eight groups ranged from 20 years to 24 years. The participants at San Antonio had a mean age of 46 years with only one female participant being within two or three years of the overall age of 20 to 24. The San Antonio group also differed from the other groups with respect to English-speaking ability. The mean rating of 3 on the instructor observation scale indicates that this group experienced a great deal of difficulty with conversational English, while a mean rating of 2 for the other groups indicated they functioned with some difficulty, but not a pronounced degree.

Pretreatment English reading level, as measured by the California Achievement Tests, Level IV, Form A achievement development scale scores, ranged from grade equivalents of 5.1 to 8.1 in reading comprehension and from grade equivalents of 5.0 to 7.5 in reading vocabulary.

For the six groups which participated in the course, most of the students did not evidence, prior to the course, sufficient mastery of occupational knowledge to function efficiently in modern work society. Four groups had mean scores of 8 to 9 on this measure. Occupational Knowledge Assessment scores in the range of 1 to 9 may be considered as representing the least competent segment of the national population with respect to performing specific tasks required in employment situations.

With the exception of the San Antonio participants, the study sample may be characterized as young Spanish-speaking adult males having left the public school system prior to earning a high school diploma. These young men, prior to entering the course, had attained an English reading level comparable to junior high school students and, although employed, did not have sufficient knowledge concerning occupational requirements to function competently within

TABLE 2

Description of Spanish-Surnamed Participants

Demonstration Group	N by Sex M	F	Age $\bar{x}$	s	Spoken English Ability $\bar{x}$	s	Pretreatment English Reading Comprehension $\bar{x}$	Vocabulary $\bar{x}$	Pretreatment Occupational Knowledge $\bar{x}$
Phase I: 1.2	5		24	4.9	2	.45	460.	472	8
1.3	6		23	6.0	2	.84	454		9
Phase II 1.4	21		21	2.5	2	0	523		9.3
1.5	5		20	1.3	2	.45	529		10.7
Phase III 1.6	14		22	3.7	2	.77	511	503	12.4
2.1 (Killeen)	4		22	1.9	2	.50	488	444	11.3
(San An.)	2	7	46	17.2	3	.50		419	9.0
(Dallas)	3	4	20	7.0	2	1.00			8.1
2.1 Total	9	11	32	17.4	2.3	.79		427	9.2
HS Control	20		22				458		
GED Control	20		22				515	475	

the employed work world.

Experimental Procedures

The evaluation study consisted of two primary treatment groups and two control or comparison treatments. The first treatment group consisted of Demonstrations 1.2, 1.3, 1.4, 1.5, and 1.6 (non-Grid), and involved a total of 51 participants. The second treatment group, Demonstration 2.1 (Grid), consisted of 20 participants. The two control or comparison treatments consisted of participation in a career-oriented high school level program for adults (HS Control) and an adult education program oriented toward successful mastery of the General Educational Development Test (GED Control).

Non-Grid Demonstrations. The non-Grid demonstrations (1.2 - 1.6) consisted of 60 hours of instruction with the instructor present. Actual student time varied. The instructional methodology was individualized, continuous-progress. The project-developed learning modules defined the activities and sequence within which the students selected their own learning activities. The instructor's role was that of diagnostician and resource person. Within this set of five demonstrations, two demonstrations had monolingual (English) instructors but bilingual curricular materials, while the remaining three demonstrations had bilingual instructors and bilingual curricular materials.

Grid Demonstrations. The Grid demonstration, 2.1, consisted of 42 instructional hours using the TTG. All participants had access to the bilingual learning modules and related resources in addition to the Grid presentations. At the San Antonio site the instructor was bilingual; however, the instructors at the Killeen and Dallas sites spoke only English, but a bilingual resource person was available for several sessions at each site. Students were encouraged to progress at their own rates rather than adjust their learning rates to the Grid presentation schedule of one module per session.

High School Control. The high school control treatment consisted of 120 instructional hours in high school level courses which emphasize reading and are structured to relate to the felt needs of the young, employed male without a high school diploma. The instructional methodology was individualized, continuous-progress. API-developed learning modules, with instructors performing the rolesof diagnostician and resource person, defined this treatment. The major variations between this treatment and the non-Grid demonstrations is course content and the availability of Spanish materials.

GED Control. The GED Control treatment consisted of 60 instructional hours. The instructional methodology was instructor-directed, total group discussions, and lecture. Individualization was at a minimum. Content consisted of English grammar, literature, and mathematics as required for successful mastery of the General Educational Development Test.

Figure 2 presents a brief summary of each of the treatment groups which may serve as a guide in later sections.

Instrumentation

Two types of instrumentation were used by the project. Pre- and posttreatment instruments were used for attaining measures of treatment effect. Criterion-referenced module posttests and attitudinal items for each module were used as part of the curriculum assessment. In addition to these instruments which quantified student response, module evaluation forms and professional rating forms were developed to quantify instructors' reactions.

Pre- and Posttreatment Instruments. Three instruments were selected for use as pretreatment and posttreatment measures. The Occupational Knowledge Test was selected to measure cognitive knowledge of basic "coping" skills necessary for employment in any field. The Attitudes toward Education and Careers instrument was selected to measure students' entry and exit attitudes

Phase I

Demonstration 1.2 - Spanish-surnamed students in API, bilingual instructor for 60 hours at 1st Cavalry Academy, January 12 - February 25, 1976

Demonstration 1.3 - Spanish-surnamed students in API, monolingual (English) instructor for 60 hours at 1st Cavalry Academy, January 12 - February 25, 1976

Phase II

Demonstration 1.4 - Spanish-surnamed students in API, bilingual instructor for 60 hours in the 2nd Armored Division High School Program, Febrary 23 - April 1, 1976

Demonstration 1.5 - Spanish-surnamed students in API, two monolingual (English) instructors for 60 hours at the 1st Cavalry Academy, March 1 - April 9, 1976

Phase III

Demonstration 1.6 - Spanish-surnamed students in API, bilingual instructor for 60 hours in 2nd Armored Division High School Program, April 12 - May 21, 1976

Demonstration 2.1 - Killeen: Spanish-surnamed students in API taught via the Telecomputer Grid for 42 hours, April 5 - May 20, 1976

Dallas: Spanish-surnamed students taught via Telecomputer Grid for 42 hours, April 5 - May 20, 1976

San Antonio: Spanish-surnamed students taught via Telecomputer Grid for 42 hours, April 5 - May 20, 1976

HS Control

Spanish-surnamed students enrolled in the API high school program for 120 hours, chosen at random from all twelve-week cycles since June, 1975.

GED Control

Students enrolled in the GED program at API for six weeks, chosen at random from cycles enrolled since June, 1975.

Figure 2. Experimental Treatment Groups

toward selected concepts. The California Achievement Tests, Vocabulary and Comprehension Subtests, Level 4, were selected as a measure of basic skills. Each instrument is described briefly in the following paragraphs.

1. Occupational Knowledge Assessment Test. The Occupational Knowledge Assessment Test was developed by the project staff. This instrument consisted of thirteen color slides, an answer sheet, and a test administration guide. The assessment is group administered and takes approximately one hour for group completion. A draft of the test administration guide, the thirteen slides, and the student answer sheet is presented as Appendix D. This instrument parallels in content the Adult Performance Level (APL) Short Form Test for occupational knowledge which was developed by the Division of Extension, The University of Texas at Austin. The APL Short Form Test was not selected for use in the project because the test must be individually administered and average administration time is over two hours. Scoring procedures for the Occupational Knowledge Assessment parallel those of the APL Short Form. The scoring procedures are as follows.

Number Correct	Functioning Level	Description
1 - 9	1	Least competent
10 - 13	2	Marginally competent
14 - 16	3	Most competent

2. Attitudes Toward Education and Careers. The Attitudes Toward Education and Careers instrument consists of two inventories. The first part of the instrument consists of a semantic differential with six concepts and nine scales per concept. The concepts selected were: School, The Ideal Job, My Job, My Spare Time, Me--At Work, and My Future. Four of the concepts had previously been used by Guion (1965) in conducting research in the area of defining work. The remaining two concepts, School and My Future, had previously been used in semantic differentials constructed for measuring student attitudes toward adult education programs. The nine scales, randomly ordered across the six concepts,

were previously identified as measuring three factors--evaluation, activity, and potency (Bashook and Foster, 1973; Sax, 1968; Osgood et al., 1957). The second inventory was a 21-item, Likert-type scale developed by the project staff. The items were broad in content, ranging from the effects of possessing an education, leisure time activities, and work, to conflict between work and education. The two instruments and scoring keys are presented as Appendix E.

3. California Achievement Tests. The vocabulary and reading comprehension subtests of the California Achievement Tests, Level 4, Forms A and B, were selected to measure the participants' mastery of English. While this standardized test does not provide normative data for Spanish-speaking adults, it does provide standard scores as well as grade equivalent scores which were helpful in correlating reading materials to functioning levels of participants. Also, conversion of raw scores to grade equivalents assisted in presenting descriptive data in an overview manner which was easily understood by a variety of readers.

Curriculum Assessment Instrument. In addition to the three instruments which were selected to measure treatment effects, several instruments were developed and used to assess the curricular materials developed and used in the Career Orientation course. These instruments were: criterion-referenced post-tests for each module, attitudinal items, module evaluation forms, and professional rating forms.

1. Criterion-Referenced Posttest. A criterion-referenced posttest was developed for each module within the course. Each student had to meet the mastery-level criteria for a module posttest before advancing to the next learning module in the course sequence. A sample of such posttests is presented with an illustrative learning module as Appendix C. Items within the posttest

are referenced to specific enabling objectives and thus to specific learning activities. Such a design accommodates analysis of the effectiveness of each learning activity.

2. Attitudinal Items. Each learning module within the Career Orientation course had particular affective objectives which were not written but implied. The Grid presentations focused on this affective development. Therefore, for Phase III implementations a set of attitudinal items for each module was included as part of the module posttest. These items are presented as Appendix F.

3. Interaction. For the purposes of the evaluation study, interaction was defined to be divergent, sustained student verbalization. To attain a measurement of the amount of interaction during a Grid session, a simple time sampling, every 10 seconds, of whether an instructor or student was talking was used.

4. Module Evaluation Form. The module evaluation form consisted of two parts. The field-test data sheet was the first part. This data sheet was completed by the instructor as students progressed through each module. Descriptive data of the students, including age, ethnic origin, and language ability, were maintained on each form. Language ability was assessed informally by the instructor using a three-category coding system. Students who functioned with little or no difficulty in the English language were assessed as 1's. Students who functioned in the English language with moderate difficulty were assessed as 2's. Students who were designated as 3's indicated severe difficulty in using the English language. This language ability assessment emphasized conversational use of language rather than reading ability measured by the CAT.

Also included on the field-test data sheet was length of time for module completion and a record of the learning activities completed by each student, prior to taking the posttest.

When all students within the class had completed a learning module, the second part of the module evaluation form was completed by the instructor. This second part allowed the instructor to summarize the information on the field-test data sheet and the observations made during the field-testing into one record. A summary was provided on reading level, content, performance, resources, and instructor suggestions. A completed sample of the module evaluation form is presented as Appendix G.

5. Professional Rating Form. A rating form was developed by the project staff to document overall reactions to the Career Orientation course. The rating form provided instructors and educators who visited the demonstration the opportunity to react to competency-based, continuous-progress instruction, integration of career information with academic content, bilingual instruction, and use of the TTG. This rating form is presented as Appendix H.

Measurement of Variables

The project procedures for measurement of variables may be categorized as Pre- and Posttreatment Measurement and Curricular Assessment. The procedures used for each category of measurement are presented in this section.

Pre- and Posttreatment Measurement. The variables to be measured prior to treatment and subsequent to treatment were cognitive development and affective development.

Cognitive Development was measured by the Occupational Knowledge Assessment Test and the California Achievement Tests of vocabulary and reading comprehension. The

Occupational Knowledge Assessment Test was administered by a member of the project staff. For all demonstrations except the Grid demonstration the pretests were group-administered on the second class day. Test administration time was one hour. For Demonstration 2.1 the Occupational Knowledge Assessment Test was administered as a pretest during the first Grid session. The test administrator and a translator were in the Killeen studio. The test administration time was extended to 90 minutes to accommodate time for Spanish translations. The CAT, Form A pretest was administered by the regular classroom instructor following the procedures outlined in the test administration manual. For Demonstration 2.1 San Antonio participants, it was noted that most could not respond to the test directions or complete the sample items. With additional assistance, the students could respond to the CAT vocabulary subtest but not the reading comprehension subtest. The pretest scores for this subgroup must be considered somewhat invalid, or as gross measures.

The posttests were administered in the same way as the pretests. It was noted that by the close of Demonstration 2.1, the San Antonio participants could and did follow the standard test administration procedures for the vocabulary subtest of the CAT, Form B.

Affective Development was measured by the Attitudes toward Education and Careers. For all demonstrations except 2.1, the pretest and posttest were group administered by a member of the project staff. For Demonstration 2.1 the test administration was conducted by the instructor.

All pre- and posttreatment tests were hand-scored by the project staff. The scores were then recorded on a master data sheet for the phase.

Curriculum Assessment Measurement. The curriculum assessment measurements consisted of criterion-referenced posttests, attitudinal items, module evaluation forms, professional rating forms, coding of interaction, and timing of audiovisual usage.

1. Criterion-Referenced Posttests. All learning module posttests were administered by the instructor at the appropriate time for the individual student. For Demonstration 2.1, the instructional support personnel administered the tests for students at remote sites. However, due to the students' lack of mastery of English, few students were able to complete the posttests.

2. Attitudinal Items. The students participating in Demonstrations 1.2 and 1.6 completed the attitudinal items at the time they would have or did complete the module posttest. The instructional support personnel were responsible for administering these items. Students in Demonstrations 1.2 through 1.5 were not provided these items.

3. Module Evaluation Forms. The module evaluation forms are given to the instructors prior to the beginning of Demonstrations 1.2 through 1.5. The instructors completed the forms as the students progressed, and submitted the completed forms to the project staff when they were completed.

4. Professional Rating Forms. The professional rating forms were administered in two ways. Educators who visited the demonstrations received the forms prior to Grid observations, and completed the forms at the close of their visits. Instructors received and completed the forms at the end of each Grid session. These forms were used for Demonstration 2.1, only.

5. Coding of Interaction. A videocassette tape of each Grid presentation was made. Each tape was subsequently coded for interaction by at least two coders. The procedures for coding were to record every 10 seconds whether a student or the master instructors were talking at that point in time. Scoring of a presentation was then calculated as the mean of the coders' ratios of student talk tallies to total number of tallies.

6. Audiovisual Usage. The videocassettes of each Grid presentation were timed. The length of time that students saw graphics, films, or other materials was also timed. The percentage of time used for audiovisual materials was then calculated for each presentation.

Scoring and Recording of Data. All learning module posttests were scored and recorded by the instructors. Tests were filed and periodically submitted to the project staff. The professional rating forms' scales were transformed to have a range from -2 to +2, with 0 indicating a neutral reaction. Module evaluation forms were analyzed by the staff and indicated revisions made. These evaluations served as one source of information determining the structure and content of the Grid presentations.

Analysis of Data

The evaluation study for the project had six research questions. The first two research questions pertained to Objective 1 of the project and related to the cognitive and affective effects of using the Grid. The remaining four research questions related to Objective 2, concerning the presentation of curricular materials via the Grid. The various analyses of the data will be presented by objective and question.

Objective 1

The first objective was to demonstrate the TTG as a viable delivery system for bilingual career education. Viability was defined to mean resulting in positive cognitive development (question A) and positive affective development (question B).

Question A. *In the context of occupational knowledge and basic skills, is there a difference in the cognitive development of bilingual adult students having the TTG as an instructional medium and bilingual adult students not having access to the TTG?*

The analyses of data conducted in response to this question consisted of one major analysis and one subsidiary analysis. Posttreatment means and standard deviations are presented in Table 3. The major method of data analysis was a regression projection model. The regression projection technique (Horst and Tallmadge, 1975) tests the difference between the observed and expected posttest means of the treatment group where the expected posttest mean is derived from the comparison group regression line. The validity of conclusions based on this model rests on the assumption that the combined-group regression line is linear over its entire range under no-treatment conditions. The utility of this model is proportional to the size of the correlation between pre- and posttest scores.

TABLE 3

Cognitive Development

Posttest Means and Standard Deviations

Demonstration	Occupational* Knowledge			California Achievement Test **					
				Vocabulary			Reading Comprehension		
	N	$\bar{x}$	s	N	$\bar{x}$	s	N	$\bar{x}$	s
Phase I									
1.2	5	11.2	2.59	5	470.8	45.77	5	498.2	54.64
1.3	5	11.2	2.77	-	-	-	5	482.3	49.92
Phase II									
1.4	20	12.2	2.72	-	-	-	21	516.5	62.98
1.5	6	11.5	2.81	-	-	-	5	519.6	55.79
Phase III									
1.6	13	13.1	2.60	14	512.8	83.55	14	522.4	100.44
2.1	20	12.1	2.09	13	532.9	54.9	-	-	-
HS Control	-	-	-	-	-	-	20	508.8	56.16
GED Control				20	530.2	37.51	20	543.4	44.32

* Raw Scores
** Standard Scores (Achievement Development)

Using the Occupational Knowledge Assessment (X_1) raw scores and the CAT Vocabulary (X_2) pretest standard scores as a predictor of the post-treatment CAT Vocabulary standard scores, the multiple regression line for the Phase III comparison group (Demonstration 1.6) was derived. The multiple correlation coefficient was .70 and the derived regression equation in raw-score form was:

$$Y' = 197.50 + 7.40\ X_1 + .45\ X_2$$

The variance of Y' was estimated using the relationship

$s_{y'}^2 = s_y^2\ (1 - R^2)$ where s_y was the standard deviation of Y in the normative sample (Tatsuoka, 1969).

A predicted posttest mean of 459.91 for the treatment group (Demonstration 2.1) was derived. The amount of treatment effect was estimated as the difference between the actual (532.92) and predicted (459.91) CAT posttest mean scores of the treatment group. The statistical significance of this difference was tested using the following formula (Winer, 1962):

$$t_{(n_1 + n_2 - 4)} = (\bar{Y}' - \bar{Y}) \div \sqrt{\frac{(N_1 - 3)\ s_1^2 + (N_2 - 1)\ s_2^2}{(N_2 - 3) + (N_2 - 1)} \left(\frac{1}{N_1} + \frac{1}{N_2}\right)}.$$

where:

N_1 = the number of participants in the comparison group

N_2 = the number of participants in the treatment group

s_1^2 = variance of the predicted scores

s_2^2 = variance of the CAT posttest scores for treatment group

$\bar{Y}'$ = predicted mean score for CAT posttest

$\bar{Y}$ = actual mean score for CAT posttest

The derived $t_{(23)} = -3.243$ was significant at the .001 level of significance, indicating that the use of the Grid resulted in significantly higher cognitive achievement than when instruction was presented without access to the Grid.

This model was selected for several reasons. As previously mentioned in the section describing the participants, the project had noncomparable treatment and comparison groups. This model which systematically undercorrects provided a conservative estimate of treatment impact.

The subsidiary analysis for Question A was an analysis of variance (Table 4) of the pre-post Occupational Knowledge raw scores for Demonstration 2.1 (use of the Grid) and Demonstration 1.6 (no use of the Grid), which indicated a significant ($\alpha = .05$) interaction between Occupational Knowledge and use of the Grid for instructional purposes. Duncan's method for a posteriori tests (Winer, 1962),

adjusted by use of the harmonic mean, was used to further identify the nature of the interaction. The mean pretest score for Demonstration 2.1 was found to be significantly lower than the mean pretest score for Demonstration 1.6. However, the mean posttest scores for the two groups were not found to differ.

TABLE 4

Analysis of Variance of Occupational

Knowledge Assessment for Grid-Use and Non-Grid-Use Groups

Source of Variation	Sum of Squares	df	Mean Square	F ratio	p
Total	580.26	65	-	-	-
Between Subjects	365.76	32	-	-	-
Groups	71.54	1	71.54	7.54	<.05
Error (b)	294.22	31	9.49	-	-
Within Subjects	214.50	33	-	-	-
Trials	68.02	1	68.02	16.57	<.01
Interaction	19.20	1	19.20	4.68	<.05
Error (w)	127.29	31	4.11	-	-

Question B. *Is there a difference in the affective development toward careers and education of bilingual adult students having the TTG as an instructional medium and bilingual adult students not having access to the TTG?*

The analyses of the pre-post Attitudes Toward Education and Careers scores consisted of a series of 2 x 2 analyses of variance (between groups and within measures). Demonstrations 2.1 and 1.6 pre-post means and standard deviations for the raw scores are presented in Table 5.

Demonstrations 2.1 and 1.6 were found to differ on five of the six concepts. For the concept "School" the groups did not differ, with both groups indicating that "School" was viewed significantly more active at the close of the project. The concept "Ideal Job" indicated a significant interaction for the evaluation and potency factors. The Demonstration 2.1 group found the "ideal job" less potent and less innately "good" after treatment, while the Demonstration 1.6 group found the "ideal job" more potent and more innately "good" after treatment. The Demonstration 2.1 group viewed current jobs more favorable and active than the Demonstration 1.6 group. For the concept "Spare Time" there was a significant interaction for all three factors. The Demonstration 1.6 group became more positive while the Demonstration 2.1 group became less positive. This same interaction pattern was found on the evaluative factor for the "Me-- At Work" concept. The Demonstration 1.6 group viewed the future as more potent than the Demonstration 2.1 group. Interpretation of these results must be made with consideration of the initial differences in the two groups (Table 2). The groups differed in sex composition and age, with Demonstration 2.1 having over 50% females and a mean age of 32 years and Demonstration 1.6 being 100% males with a mean age of 22 years.

The two demonstration groups were not found to differ on the education scale which measures broad aspects of education.

TABLE 5

Means and Standard Deviations for

Affective Measures - Demonstrations 2.1 and 1.6

		Demonstration 2.1				Demonstration 1.6			
		x		s		x		s	
INVENTORY		Pre	Post	Pre	Post	Pre	Post	Pre	Post
Part I (a)	*Factor*		*N=11*				*N=8*		
School	E	19.82	18.64	1.40	2.77	18.5	18.88	1.69	3.14
	A	14.09	15.00	4.39	3.69	13.38	15.00	2.97	3.74
	P	15.36	14.00	3.47	2.10	14.63	14.88	2.20	2.30
Ideal Job	E	18.09	16.73	3.05	3.85	18.38	20.61	2.83	.52
	A	15.64	14.82	4.00	4.35	15.75	15.25	4.20	3.96
	P	16.64	11.73	2.94	4.10	14.63	17.00	2.88	2.98
My Job	E	19.36	17.82	1.69	3.77	17.38	17.13	3.20	6.22
	A	16.09	15.64	3.86	2.98	10.63	13.5	3.46	3.70
	P	16.18	15.73	3.22	2.83	14.00	16.63	3.66	2.62
Spare Time	E	19.09	17.55	2.51	3.21	18.00	20.25	1.85	1.04
	A	17.09	13.27	3.18	3.50	15.38	17.5	4.21	2.88
	P	15.82	13.36	3.97	4.06	15.88	17.38	2.85	4.41
At Work	E	19.09	17.64	1.76	2.84	16.95	20.0	3.62	1.31
	A	14.91	16.46	6.03	3.91	16.5	15.75	2.62	3.20
	P	16.27	16.73	3.00	3.47	16.38	18.13	2.33	2.95
Future	E	18.18	18.00	2.09	2.28	16.00	18.88	4.14	3.18
	A	15.27	14.64	3.80	3.26	16.25	15.13	2.92	3.68
	P	13.36	14.27	3.96	4.13	16.75	17.0	2.96	3.21
Part II (b)			*N=16*				*N=8*		
Education Scale		73.88	77.06	7.01	5.38	76.	80.	4.78	7.29

(a) Scale: 3 = Most Negative
12 = Neutral
21 = Most Positive

(b) Scale: 21 = Most Negative
105 = Most Positive

Objective 2

The second objective was to demonstrate how bilingual career education curricular materials for Spanish-speaking adults could be presented in various communication modes or techniques via the TTG. The major communication modes or variables were interaction (question A for attitudes and question C for professional ratings) and audiovisual materials (question B for attitudes and question D for professional ratings).

A. *Is there a relationship between the amount of spontaneous interaction during TTG usage and bilingual adult students' attitudes toward selected career development aspects?*

B. *Is there a relationship between the amount of audiovisual material usage and bilingual adult students' attitudes toward selected career development aspects?*

C. *Is there a relationship between the amount of spontaneous interaction during TTG usage and professional ratings of TTG usage?*

D. *Is there a relationship between the amount of audiovisual material usage and professional ratings of TTG usage?*

A correlational analysis was conducted for the curriculum assessment measures used to provide data pertaining to the four questions of Objective 2. However, prior to the deriving of Pearson product-moment correlation coefficients the data were transformed to yield a single measure per variable per module. These measures are presented in Table 6.

The mean student response to the module attitudinal items was calculated as a simple arithmetic mean, defined as the sum of the responses divided by the total number of responses. The possible values for these attitudinal means

ranged from a most positive response of 5 to a most negative response of 1. The most positive attitudinal responses were received by the modules concerning job application forms, letters of application, job sources, and previous job experiences. These modules (1, 7, 8, and 9) emphasize actions that relate to immediate results--getting a job. Modules 3, 4, and 12, which dealt with job ladders, behavior and attitudes, and legal aspects, received the lowest or most negative attitudinal responses. These modules related to content that was futuristically oriented toward the making of plans rather than immediate applications. The overall student attitudinal mean for the fifteen modules was 3.94, which may be considered relatively positive for the course.

A simple arithmetic mean of the professional rating form items was also calculated for each module. The possible values for these rating means ranged

TABLE 6

Curriculum Assessment Measures

for Each Career Orientation Module

Module	Attitudinal Mean	Professional Rating Mean	% Time A-V	% Time Interaction
1	4.33	.62	39	10.6
2	3.90	.58	38	9.9
3	3.34	.74	52.8	7.4
4	2.79	.53	0	38
5	4.20	- .04	0	10.1
6	3.93	.15	26	16.
7	4.53	.52	43	21.4
8	4.63	- .20	56	26
9	4.84	.05	67	12.5
10	3.83	.75	40	24.5
11	3.64	.90	16.5	15.5
12	3.31	.45	1	22
13	3.84	1.00	40	8
14	3.92	- .10	43	13
15	4.12	.75	0	18.5
Total $\bar{x}$	3.94	.45	30.8	16.9
s	.54	.38	22.3	8.4

from a most positive response of +2 to a most negative response of -2. Three presentations received negative mean ratings. These presentations (5, 8, and 14) were concerned with self-awareness, letters of application, and promotions. The mean professional ratings per item are presented in Table 7. These item ratings indicated that these Grid presentations were lacking in emphasis on basic skills and audiovisual presentations. Presentations 5 and 8 also failed to integrate career knowledge with language arts skills, and the way the Grid was used was not viewed as effective. Presentations 11 and 13 received the highest ratings (.90 and 1.0, respectively) of the fifteen modules. As indicated in Table 7, Presentation 13 received positive mean ratings on all ten items. Presentation 11 received only one negative mean rating which indicated that more emphasis should be placed on basic skills.

To obtain a summary of the fifteen Grid presentations the mean rating for each of the ten rating items was calculated. When viewing the modules as a set of 15, the presentations received positive ratings on all aspects. Module sequence and classroom management were rated as the strongest aspects (Items 7 and 3). Student motivation (Item 2) was also rated high. Integration of career knowledge and language arts skills and emphasis on careers (Items 1 and 5) received the lowest ratings.

Three of the presentations (3, 8, and 9) used audiovisual materials over 50% of the presentation time, and three presentations (4, 5, and 15) did not use any audiovisuals. These audiovisuals included slides, graphs, charts, and films. The set of presentations involved audiovisuals 31% of the time.

The percentage of time spent in interaction ranged from 7.4 to 38. Presentations 2, 3, and 13 had very little interaction. Presentations 4, 8, and 10 used the most interaction. Approximately 17% of the presentation time was spent in interaction.

TABLE 7

Mean Rating of Grid

Presentations for Career Orientation Modules

Rating Item	Module 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	$\bar{X}$
1	.67	.80	.50	1.43	-.60	.67	.20	-1.00	0	.75	0	-1.50	0	0	.50	.16
2	.33	.80	1	1.29	-.20	.83	.60	.33	.50	1.50	1.50	.50	2.00	.50	1.50	.87
3	1	1.20	1	1.43	.60	.67	1.00	0	0	1.25	2.00	1.00	1.50	1.00	1.50	1.01
4	1	.60	1	1.14	.80	-.17	1.00	- .33	.75	.50	.50	.50	.50	-1.00	0	.45
5	.17	.20	-.17	-.17	.40	.17	.20	.33	.50	.50	.50	1.00	1.00	-1.00	0	.24
6	-.17	-.60	-.67	-.83	-.40	-.67	-.20	-1.00	-1.25	.25	-.50	.50	0	-1.00	- .75	.49
7	.83	1.00	1.33	1.17	1.00	1.67	1.20	1.33	1.00	1.25	2.00	1.50	2.00	1.00	1.00	1.29
8	0	0	-.17	-.67	-1.00	-1.17	.40	-1.00	- .50	.25	0	-1.50	0	-1.00	-1.50	.52
9	1	.80	.80	.75	.20	-1.00	-.20	.33	.25	.25	1.50	1.50	1.50	.50	.50	.58
10	1.4	1.00	.80	-.25	- .40	.50	1.00	-1.00	- .75	1.00	1.50	1.00	1.50	0	.75	.54

TABLE 8

Intercorrelations for

Curriculum Assessment Variables

Variables	Student Attitudes 1	Professional Ratings 2	% Time A-V 3	% Time Interact 4
1	1.00	- .43	.53*	- .32
2		1.00	- .18	- .09
3			1.00	- .33
4				1.00

*$p \leq .05$

The data presented in Tables 6 and 7 were used by the project staff to revise and modify the learning modules and videocassette tapes. Presentations that received negative ratings were analyzed in depth and modified to strengthen weak aspects.

The intercorrelations of the four variables are presented in Table 8. The correlation coefficient for student attitudes and usage of audio-visuals was found to be significant at the .05 level. Although evidence of significant relationships was not found between student attitudes and professional ratings or amount of interaction, it may be noted in Table 8 that both correlation coefficients were negative. This inverse relationship trend, which was not expected, tends to suggest that adult bilingual students and professional educators have different perspectives.

Control Group Comparisons

A series of analyses of variances was conducted in order to determine baseline data for the Career Orientation course. The first two analyses compared student cognitive development during the course under two treatments--bilingual instructor and monolingual instructor. The remaining analysis of variance compared students' cognitive development in reading during the course to the development of students in the API career-oriented high school program, and to the development of students in the API high school equivalency program.

Bilingual versus Monolingual Instruction. During Phase I field-testing the participants were randomly assigned to a bilingual instructor or a monolingual instructor. Using a two-factor repeated measures analysis of variance procedure, the pretreatment and posttreatment mean scores for reading and occupational knowledge were compared. Both groups showed a significant gain in achievement level for the two measures. Interaction of development and

treatment was not significant. Therefore, the project staff had no evidence that instruction by a bilingual instructor enhanced student achievement. During Phase II, this analysis was repeated with the findings substantiating the lack of difference between bilingual instructors and monolingual instructors. See Appendix J for summary tables.

Career-Oriented High School versus Career Orientation Course. The pretreatment and posttreatment mean scores on the CAT reading comprehension tests for the twenty Spanish-surnamed students identified as HS Control were compared with the mean scores for Phase I, Phase II, and Phase III non-Grid participants. Results of these comparisons were less than definitive in that the high school treatment group received twice as many hours of instruction as the project treatment group. The Phase I treatment group (Demonstrations 1.2 and 1.3) and the HS Control group were not found to differ in reading development. Both groups showed a significant positive change from pretreatment to posttreatment ($\alpha = .01$). The Phase II treatment group (Demonstrations 1.4 and 1.5) and the HS Control group differed on pretreatment mean scores for reading, with the Phase II group being more advanced ($\alpha = .01$). The two groups did not differ after treatment. The Phase III treatment group (Demonstration 1.6) and the HS Control group were not found to differ; both groups showed a significant positive change from pretreatment to posttreatment ($\alpha = .05$).

GED Control versus Career Orientation Course. The pretreatment and posttreatment mean scores on the CAT reading comprehension tests for twenty male students enrolled in API General Educational Development program (GED Control) were compared with the mean scores for Phase I, Phase II, and Phase III non-Grid participants. The Phase I group (Demonstrations 1.2 and 1.3) functioned at a significantly lower reading level than the GED Control group ($\alpha = .05$).

Both groups indicated a significant change from pretreatment to posttreatment (α = .01). The Phase II group (Demonstrations 1.4 and 1.5) did not show a significant gain while the GED Control group did show a significant gain in reading comprehension. The Phase III group (Demonstration 1.6) and the GED Control group did not differ, with both groups showing a significant gain in reading comprehension (α = .01).

Discussion and Conclusions

The product evaluation studies found that the Texas Telecomputer Grid (TTG) was a viable delivery system for bilingual career education. Adult Spanish-speaking students with little mastery of English showed significantly greater achievement in mastering English vocabulary and occupational knowledge than students who did not have access to TTG usage. Use of the TTG did not appear to adversely influence affective development. Students using the Grid and students not using the Grid indicated some affective changes. These changes could not be attributed to the use or nonuse of the Grid in that the students were volunteers and the two groups differed on age and socioeconomic variables.

A significant positive relationship between amount of time spent in using audiovisual materials and student attitudes was found. Audiovisual presentations that required student reactions, such as written responses and short convergent answers, appeared to be particularly effective in developing positive attitudes in the students.

Spontaneous verbal interaction via the TTG was not found to be related to student attitudes or professional ratings of the quality of the presentations. In that one of the unique features of the TTG is its ability to simulate face-to-face communications, further studies of how this feature may or should be used are warranted. The preponderance of educational research, theory, and practice indicates that personal student and teacher exchange is desirable. This development of a warm personal relationship between instructor and student is viewed as particularly important in adult education. However, the project efforts to provide such an atmosphere via the TTG were not substantiated. Indeed, the studies indicated that professional ratings of effective interaction programming and student attitudes were not congruent. There appears to be a need for intensive research concerning the learning style

of adult Spanish-speaking students. In that the course developed by the project was shown to be effective for this Spanish-speaking population, the defining parameters of this course would appear to be an area for further studies to isolate this unique learning style.

The Career Orientation course, consisting of fifteen learning modules and thirteen videocassette tapes, allows students to continuously progress at their own rates of learning. Content is presented in Spanish and in English so that when difficulty is experienced in the English version, the Spanish version may be referenced. The videocassette tapes serve as reinforcing learning activities for the modules. During the testing of the course via the TTG, the students spent approximately 31% of the time reacting to audiovisual materials and 17% of the time in discussion with the master instructors. The modules which emphasized content that could be immediately used by the students were found to facilitate the most positive student attitudes, while future-oriented content was less effective.

Professional educators rated the course as well-sequenced. Classroom management and student motivation were also viewed as very positive aspects of the course. The professional educators did find that a balanced integration of career information and basic skills was lacking when student achievement levels ranged from little or no mastery of English to adequate functional mastery of English. Therefore, the educators who judged the Career Orientation course felt that the course was appropriate for adult students who functioned at or above eighth grade level. It should be noted that this recommendation concurs with the level targeted by the curriculum development staff. When the course was implemented with Spanish-speaking adults who had approximately fifth grade or above mastery of English, the instructor did not need to be able to speak Spanish. Students of the instructors who spoke only English did as well as students

of the bilingual instructors. A bilingual instructor was necessary when the students could not comprehend simple directions in English.

The effectiveness of the Career Orientation course in facilitating reading was compared with two other adult education programs. The Career Orientation course was found to enhance reading comprehension significantly in about one-half the instructional time used for a significant increase in reading comprehension via a career-oriented high school diploma program or a high school equivalency program. The evaluation results indicated that positive student attitudes were demonstrated for the modules that could be immediately applied by the students. Therefore, the perceived relevance of the course may well account for the rapid progress made by the students.

The project demonstrated the interface of a technologically advanced communication system and an innovative instructional design to serve the needs of a student population that is known to be difficult to reach. There was little or no prior research in any of these areas. The results of these demonstrations indicated that the interface was effective in reaching adult Spanish-speaking students and provided baseline data for further use of the TTG as a career education delivery mode.

Although career education has been accepted as necessary in all educational programs, there exists little documentation that career education enhances basic skills development. The project studies did find that integrating occupationally relevant content and basic skills enhances and facilitates mastery of basic skills. The studies also indicated that Spanish-speaking adults are educationally unique and that further research concerning this uniqueness is needed.

In summary, it appears that the following recommendations are warranted:

1. The project-developed bilingual Career Orientation course has been intensively field-tested and revisions made, which resulted in a course that was

effective for the population served. Therefore, the course should be implemented and evaluated with Spanish-speaking adults at other locales.

2. In that the course integrated only a segment of career information with a segment of basic skills, the curricular design, including use of the TTG, needs to be applied to other areas of career education and evaluated further.

3. The demonstrations provided baseline data for further studies in bilingual adult career education. Additional studies which would provide educators with definitive guidelines for using student-teacher interaction, bilingual materials, and audiovisual materials with adults, are needed. The lack of congruence between educators' perceptions and Spanish-speaking adult students' attitudes tends to substantiate this need.

III. Project Participants

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

CAREER EDUCATION PROGRAM

PARTICIPANT SUMMARY

NOTE. Participants include those DIRECTLY served by the project or, in the case of most parents and persons in the business/labor/industry community, who actively assist in project implementation. "Actively assist" includes efforts such as serving as resource persons, serving on Advisory Groups, providing work experience, etc.

FORM APPROVED
OMB NO. 51-R1187

NUMBER OF PARTICIPANTS (see NOTE above) WHO ARE	RACE/ETHNICITY (all Participants including Handicapped, Gifted and Talented, and Low Income)						OF THE TOTAL (column (6)) NUMBER WHO ARE			OF THE TOTAL (column (6)) NUMBER WHO ARE	
	AMERICAN INDIAN OR ALASKAN NATIVE (1)	ASIAN OR PACIFIC ISLANDER (2)	BLACK/ NEGRO (3)	CAUCASIAN/ WHITE (4)	HISPANIC (5)	TOTAL (sum of columns (1) through (5)) (6)	HANDICAPPED (7)	GIFTED AND TALENTED (8)	LOW INCOME (9)	MALE (10)	FEMALE (11)
STUDENTS											
ELEMENTARY (K-6)											
MIDDLE/JUNIOR HIGH (7-9)											
SENIOR HIGH (10-12)											
2-YEAR COLLEGE											
4-YEAR COLLEGE											
ADULTS (non-matriculated)				113	105	218			218	207	11
SUB-TOTAL				113	105	218			218	207	11
EDUCATIONAL PERSONNEL											
TEACHERS			1	10	5	16				5	11
COUNSELORS			1	1		2				1	1
ADMINISTRATORS				16	6	22				18	4
MEMBERS OF THE BUSINESS/ LABOR/INDUSTRY COMMUNITY				5	5	10					
PARENTS											
OTHER (specify)											
TOTAL			2	145	121	268					

OE FORM 1367, 2/76

IV. CHANGES AND/OR PROBLEMS

A Preservice Conference, Demonstration 1.1, was initially planned as a major dissemination activity for the project. This Interact Conference, to be conducted via the Texas Telecomputer Grid, was not conducted. This was due to difficulty in scheduling the key participants for the conference. The lack of not conducting the conference was not viewed as seriously affecting the project. Such a conference may be conducted during the next year if arrangements can be made.

V. DISSEMINATION ACTIVITIES

Basically, two methods were utilized for project dissemination. The first method was through a conference, and the second method was through small group sessions with various educational personnel.

Information concerning the project was disseminated through an Adult Performance Level (APL) Project Conference held in Austin, Texas on September 14 through September 17, 1975.

Representatives from throughout the State of Texas attended the conference. Also attending the conference were state leaders in Adult Education from Oklahoma, Arkansas, Louisiana, and New Mexico.

Small group sessions concerning the project have been held with the following:

- Laredo Independent School District and Laredo Community College, Laredo, Texas
- U. S. Army, Ft. Hood, Texas
- Dallas Independent School District, Dallas, Texas
- Region XX, Education Service Center, San Antonio, Texas
- Texas Education Agency, Austin, Texas (Career Education, Adult Education, and Occupational Research and Development)
- Director of Vocational Schools of the Armed Forces and National Police, and Supervisor of the Labor Schools, Dominican Republic

Project activities will also be disseminated through the final report, which will contain bilingual Career Orientation course materials for Spanish-surnamed adults.

APPENDICES

APPENDIX A

Description of the Texas Telecomputer Grid Microwave System

DESCRIPTION OF THE TEXAS TELECOMPUTER GRID MICROWAVE SYSTEM

General

Three areas of technology that are predominant in this period of rapid technological change are communications, computers, and television. Communications networks provide the means for exchanging and disseminating masses of information. Television provides the means for imparting great amounts of video-audio information to people. This particular area of technology has reached a stage of development where it can and does have a profound effect upon every aspect of daily living. Furthermore, when these areas of technology are used in combination with one another, a synergetic effect is achieved.

For the first time in history, the means are available to provide uniform distribution of educational services to every citizen regardless of particular geographic location or economic condition. Communications, television, and computers provide this means. American Technological University has access to a system that was originally developed by Central Texas College and which shows great promise for combining these three areas of technology to enhance the overall educational process. This system is called the Texas Telecomputer Grid.

The name Telecomputer Grid is derived from the two main components of the system--telecommunications and computers. Telecommunications, in this instance, is meant to include audio communications, data communications, and television. The system itself is merely a judicious assemblage of available computer and telecommunications components into a comprehensive network. The network employs regional concentrations of computer and television resources and connects them by microwave. These resources are further distributed via

existing and proven cost-effective communications techniques to potential users in metropolitan, suburban, and rural population centers. The network itself is arranged into a grid so that resources can be readily and rapidly shifted to meet varying peak demands. The Telecomputer Grid has reached its prototype testing phase. The first segment of the prototype is operational between Dallas, Ft. Worth, Waco, Killeen, Austin, and San Antonio, Texas. The system has been engineered to connect it into Houston, Texas, the fifth largest metropolitan area in the U.S. When the Grid is extended as indicated in Figure 3, 60% of the population of the State of Texas will be serviced.

With the cooperation of the U.S. Office of Education, the Texas Education Agency, and Central Texas College, a feasibility study was conducted in 1970 for the development of the duplex microwave system. Succeeding cooperative efforts have resulted in existing facilities providing operational telecommunication service between Killeen and Austin, Texas, with an extension of the service to San Antonio, Dallas, and Ft. Worth.

On October 7, 1972 the Texas State Board of Education authorized the Texas Education Agency to participate in a cooperative educational consortium with other Texas educational institutions for the purpose of preparing a proposal to the U.S. Office of Education. The proposal requested a direct grant to conduct a pilot study of educational aspects of the system and to collect financial data.

Members of the consortium, other than the Texas Education Agency, are the Dallas and Ft. Worth Independent School Districts; Region IV (Houston) and Region XX (San Antonio) Education Service Centers; and Central Texas College. As part of the State's contribution to this effort, a microwave drop with corresponding TV and data equipment has been installed in Austin, Texas, near the Texas Education Agency.

Texas Telecomputer Grid

Figure 3. TTG Network

Principal use of the system by consortium members at the present time may be classified in three categories:

1. The data system may be utilized to determine the effectiveness of interconnection of central offices of participating institutions for the ready transferral of current information to assist in planning, evaluating, and reporting procedures.

2. The duplex (two-way) video and audio transmission capabilities will be studied for effectiveness in mass teacher-training, in the introduction and dissemination of administrative changes and program information, and for instructional purposes and other uses.

3. The third category of study will encompass utilization of a combination of data and TV capabilities for computer-assisted instruction; televised instruction, such as training in computer programming; etc.

Detailed System Description

The Texas Telecomputer Grid Microwave System provides simultaneous full-duplex television, data, and voice communications service between Central Texas College, Killeen, Texas, and other educational institutions or agencies participating in the Texas Telecomputer Grid Consortium.

As such, the system is presently completed or under construction to serve Central Texas College and American Technological University at Killeen; Austin; Gatesville; Waco; Hillsboro; Cleburne; Ft. Worth; Cedar Hill; Dallas; and San Antonio. In addition, the system is licensed for construction to service Temple, Cameron, Hearne, Bryan/College Station, Huntsville, Conroe, and Houston. Planning is presently in progress to extend the system south from San Antonio to Corpus Christi, Harlingen, and Laredo, with ten intermediate insert and drop stations.

The video with program channel conforms to applicable broadcast and industry specifications for color or monochrome television. The data multiplex

system conforms to applicable common carrier specifications for voice and data transmission.

Existing System Operational Capabilities

A single, full-duplex, full-color video channel with program audio is provided between the extreme terminal points of San Antonio and Dallas. Any intermediate station may insert a video signal into the system in either direction. However, this precludes an intermediate station from sending a signal beyond the inserting station in the same direction. For example, Waco may operate simultaneously, full-duplex north to Dallas and full-duplex south to San Antonio. (Note: The latter depends on the interconnect service between the M/W relay and the originating studio in Waco.)

Full-duplex, four KH_z bandwidth, frequency division multiplexed (FDM), 4.8 to 9.6 kilobit data channels are configured presently as follows:

Two channels	- Killeen/Dallas
Two channels	- Killeen/Ft. Worth
Two channels	- Killeen/Gatesville
One channel	- Killeen/Waco
Four channels	- Killeen/Austin
Four channels	- Killeen/San Antonio

These channel locations and quantities may be reconfigured to meet operational circuit requirements. The system may be expanded to increase the number of FDM channels from Killeen north to 17 channels, and from Killeen south to 20 channels.

Presently, all circuit testing, switching, and routing is accomplished at the "Hub" of the Telecomputer Grid located on the CTC Campus at Killeen, Texas. Total system reliability is presently estimated at 94.9995 percent.

This will be improved to Bell System standards as the system is expanded and additional maintenance resources become available.

System Utilization

The Austin-Killeen part of the system has been tested in various modes. It was utilized from September, 1972 to May, 1973 for two instructional courses offered via duplex video and data transmission:

- A Spanish class for the disadvantaged, the object of which was to give the disadvantaged a clear understanding of the English language.
- A course in computer science. This course utilized both aspects of the system, daily data transmission from the terminal in Austin and two-way video/audio.

Prior to this demonstration project the system was used to provide career education training for teachers at the elementary school level. This involved 80 teachers, 20 each in Killeen, Ft. Worth, Dallas, and San Antonio. Programming originated in Killeen, Ft. Worth, and Dallas, with video and audio interaction between all participating groups. An additional use of the system has been for a doctor-patient consultation between Killeen and Dallas. This utilization clearly demonstrated that a specialist could consult with a patient several hundred miles away, read the x-rays, talk over physical conditions, and make a diagnosis and prognosis for the patient's recovery using the video and data capabilities of the system. In a much broader sense, the system has been used to demonstrate the capability of conducting workshops and seminars relating to occupational education. The demonstrations have also proved that the system is quite viable and effective when used for conferences or meetings, thus bringing groups of people together by use of the system instead of the participants having to travel many miles from different

locations. Other demonstrations have also indicated that the system will be quite viable in a setting in which one instructor will teach a small number of students at various locations.

With respect to data transmission, the system has proved to be comparable to land-line communications systems, especially for higher data speeds of transmission. Data has been transmitted on the system between Killeen and the Gatesville Mountain View School for Boys as a remote job entry to the CTC computer. Data speeds up to 9.6 kilobit rate have been successfully transmitted simultaneously with full-color video transmission.

APPENDIX B

Project Career Advisory Board

APPENDIX B

Texas Telecomputer Grid/Bilingual Career Education Demonstration Project

Career Advisory Board

1. Dr. Josephine Sobrino
   Director, Professional Education
   U. of Houston at Clear Lake City
   Houston, Texas 77058

2. Mr. B.J. Stamps
   Asst. Supt. - Instructional Services
   Dallas Independent School District
   3700 Ross Avenue
   Dallas, Texas 75204

3. Mr. Walter Rambo
   Director, Career Education
   Texas Education Agency
   Austin, Texas 78701

4. Mr. Gene B. Oppy
   Director of Education for Ft. Hood
   Ft. Hood, Texas 76544

5. Mr. Fernando L. Peña
   Asst. Supt. for Instruction
   Laredo Independent School District
   1701 Houston St.
   Laredo, Texas 78040

6. Dr. Roy Dugger
   President Emeritus
   Texas State Technical Institute
   Waco, Texas

7. Dr. Elvis Arterbury
   Director, Partners in Career Education
   1201 N. Watson Rd.
   Suite 130
   Arlington, Texas

8. Ms. Doris West
   Consultant for Career Education
   Region XI Education Service Center
   Ft. Worth, Texas

9. Jimmy G. Palacio, Sr. (student soldier, Co. C 1/5 Cav.)
   5512-2 Hughes
   Ft. Hood, Texas 76545

APPENDIX C

Sample Learning Module

INTERVIEWS
ENTREVISTAS

ENTREVISTAS

Requisitos Previos:

Módulos 8, 9 y 10

Introducción:

Ahora que Ud. ha completado laboriosamente los Módulos 8, 9 y 10, está preparado para dar el último paso hacia aquella deseosa e importante situación: La ENTREVISTA. Su manera de actuar durante esta entrevista puede hundir todos sus cuidadosos esfuerzos anteriores, o puede ayudarle a conseguir ese trabajo que le es especialmente importante. Es su oportunidad de mostrarse a sí mismo en sus mejores aspectos y hacerle resaltar entre los demás. Todo lo que ha estado haciendo con anterioridad ha sido prepararse para este momento glorioso.

Si Ud. no está seguro de sí mismo o siente un nudo en el estómago cuando piensa que va a estar hablando con su JEFE, entonces, trabaje cuidadosamente a través del Módulo 11 ya que ha sido diseñado para ayudarle a saber exactamente el tipo de conducta que se espera de Ud., la clase de preguntas que se le harán y las preguntas que debería Ud. hacer. También está diseñado para incrementar su confianza en sí mismo. Cuanto mejor sepa lo que se espera de Ud. en una entrevista más seguro se sentirá.

El Módulo 11 no sólo le dirá la clase de apariencia personal que es deseada sino que también le ayudará a conocer la mejor manera de expresarse. El artículo que leerá seguidamente ha sido tomado de un periódico para los profesionales del campo de la orientación. Leyéndolo se dará cuenta de la importancia de este módulo.

INTERVIEWS

Prerequisites:

Modules 8, 9, and 10

Overview:

Now that you have painstakingly completed Modules 8, 9, and 10, you are ready for your last step to that all-important job --The INTERVIEW. Your performance during this interview can negate everything you have so carefully done before, or it can help land that really special job. It is your chance to show your winning colors, to stand out in a crowd. Everything you have done so far has been preparing you for this one glorious moment.

If you are unsure of yourself or feel butterflies in your stomach at the thought of actually talking to the BOSS, then carefully work through Module 11. It has been designed to help you know exactly what type of behavior is expected of you, what kind of questions you'll be asked, and what questions you should ask. It is also designed to help build up your confidence. The more you know about what is expected of you in an interview, the more sure of yourself you'll be.

Module 11 not only will tell what is being looked for in good grooming habits, but will also help you to know the exact words to say. Read the article which appeared in a counseling profession newspaper. It will help you realize the importance of this module.

LOS ENTREVISTADORES DICEN PORQUE
ALGUNOS SOLICITANTES SON RECHAZADOS

La revista de profesiones New Digest informa que una escuela técnica le preguntó a 153 patronos las causas por las que los aspirantes a un empleo pierden la oportunidad de obtener un trabajo al ser entrevistados.

Estos son los 10 puntos básicos:

- falta de buena apariencia personal;
- falta de interés y entusiasmo;
- no mirar directamente al entrevistador cuando están conversando;
- llegar tarde a la entrevista;
- no hacer preguntas sobre el trabajo;
- ser agobiante: tener la actitud de "sabelotodo";
- inhabilidad de expresarse claramente; una voz, dicción y gramática pobre; y
- falta de planes para una carrera: no tener propósitos ni metas.

Enero 15, 1976 GUIDEPOST

Referencias:

How to Put Your Best Foot Forward to Get That Job, Don Dachner
Individualized Related Instruction for Entering the World of Work, Kimbrell, Veneyard
Finding Your First Job, Curt McDaniels

Equipo y Materiales Necesarios:

Audio cassette (opcional)

Video-cassette y monitor de T.V. (opcional)

Cinta video-cassette en color "Entrevistas" (opcional)

Interviewers Tell Why Applicants Rejected

A technical school asked 153 employers what causes interviewees to lose the chance of obtaining a job, reports career News Digest.

There were 10 basic points:

- poor personal appearance;
- lack of interest and enthusiasm;
- failure to look at an interviewer when conversing;
- late to interviews;
- asks no questions about the job;
- overbearing; "know it all" attitude;
- inability to express self clearly; poor voice, diction, grammar; and
- lack of planning for career: lack of purpose of goals.

January 15, 1976 **GUIDEPOST**

References Needed: How to Put Your Best Foot Forward to Get That Job, Don Dachner
Individualized Related Instruction for Entering the World of Work, Kimbrell, Vineyard
Finding Your First Job, Curt McDaniels

Equipment and Materials Needed:

Audio cassette tape recorder (optional)

Videocassette player and TV monitor (optional)

Color videocassette tape, "Interviews " (optional)

Objetivos del Módulo:

El entrevistarse con posibles patronos para intercambiar ideas acerca de las calificaciones del aspirante y de los requisitos del trabajo.

OBJETIVOS FINALES DE LAS ACTIVIDADES DE ESTUDIO

Resumen de Actividades:

El estudiante será entrevistado para un trabajo por su instructor.

Condiciones y Limitaciones:

La sesión de su entrevista se dividirá en 3 partes, que se desarrollarán de la siguiente manera:

A. Ud. tendrá treinta minutos para escribir las respuestas a tres preguntas relacionadas al propósito y procedimientos de una entrevista.
B. Ud. será entrevistado por su instructor para un trabajo.

   Antes de empezar la entrevista, tenga en cuenta lo siguiente:
   1. Tendrá 5 minutos para mirar el formulario de evaluación que será usado.
   2. Deberá indicar el trabajo por el que será entrevistado.
   3. Para indicar que está preparado deberá presentar su formulario de solicitud de empleo, curriculum vitae, tarjeta del seguro social, bolígrafo y papel.

C. Ud. tendrá 30 minutos para escribir la carta de apreciación y entregársela a su instructor.

Criterio de Evaluación:

1. Las tres preguntas escritas deberán contestarse correctamente dentro del tiempo límite, o no se le concederá la entrevista.
2. Ud. deberá recibir un mínimo de 70 puntos en su calificación de la entrevista. Esta evaluación estará basada en su apariencia personal, conducta, interés, preparación, gramática y dicción.
3. La carta de apreciación deberá escribirse en correcta gramática y formato apropiado dentro del tiempo límite.

Instrucciones Para El Examen Previo:

Si después de repasar los Objetivos Finales se cree Ud. preparado para llevarlos a cabo, lea sus Objetivos de Capacitación para asegurarse de que no se ha olvidado de nada que pueda serle útil. Si todavía se considera capacitado, solicite de su instructor la hoja de examen de "Entrevistas".

Competency Statement:

Interviews with possible employers to exchange information about the applicant's qualifications and the job's requirements.

TERMINAL PERFORMANCE OBJECTIVE

Performance Statement:

You will be interviewed for a specific job.

Conditions and/or Limitations:

Your interview session will be divided into 3 parts. You will:

A. Have thirty minutes to write the answers to three questions concerning the purpose and procedure of an interview.
B. Be interviewed for a job by your instructor. At the time the interview begins, you will--
   1. have 5 minutes to look at the evaluation form to be used,
   2. state the job you are to be interviewed for, and
   3. present your application form, résumé, social security card, and pen or pencil to indicate your preparedness.
C. Have thirty minutes to write a follow-up letter and return it to your instructor.

Criteria of Acceptance:

1. The three written questions must be correctly answered within the time limit or the interview will not be given.

2. You must receive a rating of 70 or above on your interview. This rating will be based upon your grooming, behavior, interest, preparedness, grammar, and voice.

3. The follow-up letter will be written with correct format and grammar within the time limit.

Pretest Instructions:

If after studying the Terminal Performance Objective you feel you can complete the objective, read the Enabling Objectives to make sure you have not overlooked something you will need to be successful. If you still feel ready, request a pretest from your instructor.

OBJETIVOS DE CAPACITACION

Para dominar los Objetivos Finales del Módulo Ud. debe saber:

1. Identificar el propósito de una entrevista.
2. Leer y ver en película ejemplos de "buenas" y "malas" conductas en una entrevista.
3. Hacer una lista de lo que se "debe hacer" y de lo que "no se debe hacer" (incluyendo la apariencia personal apropiada).
4. Prepararse para una entrevista de la siguiente manera:
   a. averiguar el nombre, título o cargo de su entrevistador,
   b. estar preparado para contestar a las primeras preguntas generales,
   c. juntar los artículos que debe llevar a una entrevista,
   d. preparar sus propias preguntas.
5. Escribir una carta de apreciación por haber sido otorgado una entrevista.
6. Simular una entrevista con un compañero de clase, haciendo los dos papeles, el de entrevistador y el de entrevistado.
7. (Opción para estudiantes militares). Repasar los procedimientos generales de un tribunal de promociones.

ACTIVIDADES DE ESTUDIO

Las Actividades de Estudio del 1 al 4 pueden completarse mirando el video-cassette "Module 11 - Interviews" (Módulo 11 - Entrevistas), o completando las actividades de estudio tal y como están escritas.

1. Deberá identificar el propósito de una entrevista.

   A. El propósito de una entrevista es el de evaluarle a Ud. en dos áreas:

      1. Personalidad (apariencia personal, intereses, actitud).
      2. Experiencia (preparación y aptitudes).
         También le da la oportunidad de obtener información acerca del trabajo para ver si se ajusta a sus necesidades.

2. Lea o vea en película ejemplos de "buenas" y "malas" conductas en una entrevista. Seleccione por lo menos una de las siguientes Actividades de Estudio y entonces complete la Evaluación Propia 2A.

   A. Vaya a la página 38 del libro "How to Put Your Best Foot Forward to Get That Job" (Cómo Dar el Primer Paso para Conseguir Empleo). Lea el capítulo titulado "The Interview" (La Entrevista) que empieza en esa página y continúa hasta el final de la página 48. Este capítulo está lleno de sugerencias para tener éxito en la entrevista. Como ejemplo para ilustrar lo que expone, el autor usa una situación en que el entrevistado comete un error tras otro.

   B. Obtenga una copia del Manual de Instrucción Individualizada para Entrar en el Mundo del Trabajo. Pase a la página 38 y lea, empezando en el párrafo titulado "Interviews" (Entrevistas), hasta la página 43.

ENABLING OBJECTIVES

To master the Terminal Performance Objective you should be able to:

1. Identify the purpose of an interview.
2. Read and view examples of "good" and "bad" interview behavior.
3. List do's and don'ts of a job interview (including appropriate grooming.)
4. Prepare yourself for a job interview by:
   a. identifying the name, title, or job functions of your interviewer.
   b. answering "opening questions."
   c. collecting the items to carry with you to an interview.
   d. preparing your own questions.
5. Write a follow-up letter.
6. Role play with another student both the applicant and the employer in an interview situation.
7. (Optional--for students in military) Review general procedure of promotion board.

LEARNING ACTIVITIES

Learning Activities 1 through 4 may be completed by viewing videocassette "Module 11 - Interviews," or by completing the learning activities as they are written.

1. Identify the purpose of an interview.

   A. The purpose of an interview is to evaluate you in two areas:

      1. Personality (appearance, interest, attitude)
      2. Background (qualifications and aptitude)

      It is also your opportunity to get information about the job to see if it is going to meet your needs.

2. Read or view examples of "good" interview and "bad" interview behavior. Select <u>at least one</u> of the Learning Activities below and then complete Self-Assessment 2A.

   A. Turn to page 38 in the book <u>How To Put Your Best Foot Forward to Get That Job</u>. Read the chapter titled "The Interview" that begins on that page and continues to the bottom of page 48. This chapter is full of suggestions for a successful interview. As an example to teach from, the author uses a situation in which the interviewee makes one blunder after another.

   B. Obtain a copy of <u>Individualized Related Instruction for Entering the World of Work</u>. Turn to page 38. Begin reading with the paragraph title "Interviews" and continue to page 43.

C. Localice una copia del manual "Finding Your First Job" (Cómo Encontrar Su Primera Colocación). Pase a la página 45 y lea el capítulo (6) sobre "The Interview" (Las Entrevistas).

3. Haga una lista de lo que se "debe hacer" y de lo que "no se debe hacer" en una entrevista para obtener empleo (incluyendo la apariencia personal apropiada).

A. Complete la Hoja de Trabajo 3A. Enséñesela a su instructor para que la repase.

4. Prepárese para una entrevista de la siguiente manera:

a. averigüe el nombre, título u ocupación de su entrevistador,
b. esté preparado para contestar a las primeras preguntas generales,
c. prepare sus propias preguntas,
d. repase los artículos que debe Ud. llevar consigo a la entrevista.

A. Obtenga una copia de la Hoja de Trabajo 4A y complete todos los ejercicios. Una vez que haya terminado muéstrele a su instructor la hoja de trabajo para que la evalúe.

5. Escriba una carta de apreciación.

A. Complete la Hoja de Trabajo 5A. Entréguesela a su instructor.

6. Simule una entrevista con un compañero de clase haciendo los dos papeles, el de entrevistador y el de entrevistado. (Lea las instrucciones de estas 3 Actividades de Estudio antes de empezar a llevar a cabo la primera).

A-1. Localice otro estudiante que también esté preparado para la entrevista de esta actividad de estudio. Obtenga una copia del Formulario de Evaluación 6A para cada uno de Uds. y úsenlas cuando estén simulando la parte del entrevistador. Llenen el formulario después de haber terminado la entrevista de acuerdo con la conducta de "los solicitantes".

Cuando Uds. dos hayan terminado esta tarea, entréguenle los formularios a su instructor.

Busquen un rincón donde no molesten al resto de la clase. Seleccionen el trabajo que quieran solicitar y sáquenle provecho a esta oportunidad de ensayo para estar preparados cuando llegue la entrevista real.

A-2. La manera en que se exprese Ud. durante la entrevista tendrá mucho efecto en sus posibilidades de conseguir el trabajo. Existen varios errores gramaticales muy comunes que merecen que les prestemos atención. Aunque no es posible corregir todos esos errores gramaticales o reducirlos enormemente, por lo menos, los siguientes ejercicios le ayudarán a identificarlos. El conocer cuáles son es tan sólo el principio del desarrollo progresivo de una mejora del uso de la gramática.

C. Locate a copy of the workbook Finding Your First Job. Turn to page 45 and read the entire chapter (6) on "The Interview." It ends on page 51.

3. List do's and don'ts of a job interview (including appropriate grooming).

A. Complete Worksheet 3A. Show it to your instructor for review.

4. Prepare yourself for a job interview by:

a. identifying the name, title or job functions of your interviewer
b. answering "opening questions"
c. preparing your own questions
d. reviewing items to carry with you.

A. Obtain a copy of Worksheet 4A and complete all exercises. Show the completed worksheet to your instructor for evaluation.

5. Write a follow up letter.

A. Complete Worksheet 5A. Turn it in to your instructor.

6. Role play with another student both the applicant and the employer in an interview situation. (Read these 3 learning activities before beginning the first.)

A-1. Locate another student who is prepared for this interview/learning activity. Obtain copies of Evaluation Form 6A for each of you to use when you are role playing the part of the interviewer. Fill in the form according to the "applicant's" behavior after you have completed the interview.

When both of you have completed this task, turn the form in to your instructor.

Find a corner where you will not disturb the rest of the class. Select a job to apply for and take advantage of this opportunity to practice for the real thing.

A-2. The manner in which you express yourself during your interview is going to have a great effect on your chances of getting the job. There are several very common grammar errors that pop up in conversation often enough to earn some attention here. While it will not be possible to do away with all grammar errors or even to reduce incorrect use of grammar to a large degree, the following exercise will increase your awareness of these mistakes. Awareness is only the beginning of developing improved grammar.

A-3. (Opcional) Aunque Ud. no esté muy de acuerdo con esta idea, le serviría de gran experiencia el grabar su entrevista de práctica. Se sorprenderá de la gran cantidad de errores que comete al hablar y de su propia manera de expresarse. Aunque, esperamos, Ud. tendrá más cuidado y hará un mayor esfuerzo cuando mantenga su entrevista en la realidad que cuando la esté simulando con un compañero de clase.

Pídale a su instructor una grabadora y una cinta magnetofónica (cassette). Grabe su entrevista, escúchela después y compare la evaluación que haya recibido de su compañero con lo que Ud. oirá. Escuche atentamente en busca de los errores comunes como "I done" y "they was."

7. (Opcional -- para estudiantes militares) Repase los procedimientos generales de un tribunal de promociones.

A. Lea el Material de Estudio 7A. Una vez lo haya leído, quizás Ud. querrá continuar averiguando los procedimientos de un tribunal de escrutinio más detalladamente. Tal vez su instructor tiene más material de estudio. Su primer sargento también le puede ayudar, probablemente.

A-3. (Optional) Though you might be quite uncomfortable with this idea, it would be a very good experience for you to tape your practice interview. You will be surprised at your own manner of speech and the common word mistakes that you make. It is true (hopefully) that you will be more careful and you will put more effort into the "real thing" than you will when you are sitting in a classroom with a buddy role-playing an interview.

Ask your teacher for a recorder and cassette. Tape your interview. Play it back, compare the rating you received from your partner with what you actually hear. Listen closely for common errors like "I done" and "They was."

7. Review general procedure of promotion board. (Optional--for students in the military)

A. Read Learning Resource 7A. After reading this you may wish to pursue review board procedures in detail. Your instructor may have further resources. Your first sergeant will be able to help you.

EXAMEN PREVIO A

Equipo y Materiales: Papel y lápiz
Referencias: Ninguna
Tiempo Límite: 30 minutos

Instrucciones:

NO ESCRIBA EN ESTA HOJA. Se le dará una hoja para respuestas. Ponga su nombre, el número del modúlo y la fecha en la esquina superior de la derecha de su hoja de respuestas. Ud. tendrá 5 minutos para revisar el examen y las direcciones. Si tiene preguntas las puede hacer durante ese período. Espere hasta que le digan que puede empezar.

Evaluación:

1. Cuatro (4) de las cinco (5) respuestas de falso /verdad deben estar correctas.
2. Se debe expresar el propósito de una entrevista.
3. Deberá indicarse por lo menos tres (3) de cuatro (4) de las preguntas que quizás le harán en la entrevista.
4. Deberá exponerse cuatro (4) de cinco (5) de las razones por las que algunas personas no consiguen el empleo.

PRETEST A

Equipment and Materials: Paper and pencil
References: None
Time Limit: 30 minutes

Instructions:

DO NOT WRITE ON THE TEST. You will be given an answer sheet. Put your name, the course number, the competency number, and today's date in the upper right-hand corner of your answer sheet. You will be allowed 5 minutes to review the exercise and directions. Ask any questions you may have during this period. Wait until you are told to begin.

Evaluation:

1. Four (4) of the five (5) true/false statements must be correct.
2. The purposes of an interview must be stated.
3. Three (3) of four (4) questions that you might be asked must be stated.
4. Four (4) of five (5) reasons why people might not be hired must be stated.

1. Coloque una "T" en el espacio de la izquierda si la afirmación es verdad y una "F" si es falsa.

_____ 1. La primera impresión que saque de Ud. su patrono se basará en su apretón de manos.

_____ 2. Ud. puede fumar durante la entrevista.

_____ 3. Si Ud. llega a la entrevista uno o dos minutos tarde no le dañará sus posibilidades de obtener el empleo.

_____ 4. Ud. debería demostrar su interés hacia la compañía preguntando alguna cosa sobre sus productos o servicios.

_____ 5. Ud. debería quedarse de pie hasta que el entrevistador le indique que se siente.

2. Señale el propósito de una entrevista.

   1.

   2.

3. Escriba 4 preguntas generales que quizás le hagan durante la entrevista

   1.

   2.

   3.

   4.

4. Escriba 5 razones por las que algunas personas no consiguen el empleo.

   1.

   2.

   3.

   4.

   5.

Pretest A, page 2

1. Place a "T" in the blank if the statement is true. Place an "F" in the blank if the statement is false.

_____ 1. The employer's first impression of you when you arrive for the job interview will be based on your firm handshake.

_____ 2. It is permissible to smoke during an interview.

_____ 3. If you arrive at a job interview a minute or two late, it will usually not hurt your chances for obtaining the position.

_____ 4. You should show your interest in the company by asking some questions about its products or services.

_____ 5. You should stand until the interviewer asks you to sit.

2. Give the purposes for the interview.
   1.

   2.

3. List four opening questions that might be asked of <u>you</u> during the interview.
   1.

   2.

   3.

   4.

4. List any 5 reasons why people might not be hired.

   1.

   2.

   3.

   4.

   5.

EVALUACION PROPIA 2A

Ahora que Ud. ya ha leído acerca de la conducta apropiada en una entrevista para un trabajo, póngase a sí mismo a prueba para ver si ha captado cuál es esta conducta.

Haga un círculo alrededor de la T por "verdad" o alrededor de la F por "falso".

T F 1. Ud. debería excusarse inmediatamente por no tener más experiencia de la que tiene.

T F 2. Un punto importante en el que se ha de insistir repetidamente es la cantidad de dinero que Ud. ganará.

T F 3. No se siente hasta que se lo indiquen.

T F 4. Si Ud. realmente quiere el trabajo, cuéntele al patrono todos sus problemas y las privaciones por las que pasa su familia.

T F 5. Con el estilo casual de vestir de hoy en día, Ud. puede llevar lo que quiera cuando vaya a la entrevista.

T F 6. Para actuar normal y que las cosas lleven su curso, no se prepare para la entrevista.

T F 7. No ponga objetos personales sobre el escritorio del entrevistador.

T F 8. Cuando se presente a sí mismo, Ud. debería hablar claramente y sonreír.

T F 9. No encienda un cigarrillo hasta que haya estado sentado por cinco minutos.

T F 10. Estaría acertado traer a un amigo a la entrevista para que pueda hablar favorablemente acerca de Ud.

T F 11. No critique a sus antiguos patronos.

T F 12. Hágase el desinteresado si le ofrecen el trabajo, así el patrono le aumentará el sueldo.

T F 13. Esté preparado para explicar su interés en la compañía en la que se está entrevistando.

T F 14. Si su formulario de solicitud de empleo no está completo, su patrono puede ayudarle a completarlo cuando mantengan la entrevista.

T F 15. Si le piden que tome un examen antes del empleo para medir sus conocimientos y su habilidad, sus derechos civiles están siendo violados.

SELF-ASSESSMENT 2A

Now that you have read about job interview behavior, check yourself to see if you have a good grasp of proper interview behavior.

Circle T for "true" or F for "false."

T F 1. You should apologize immediately for not having more job experience than you do.

T F 2. The one point to stress repeatedly is the amount of money you will be earning.

T F 3. Do not take a seat until you are told to do so.

T F 4. If you really want the job, tell the employer about all of the hardships you and your family are going through.

T F 5. With today's casual lifestyles you may wear anything that you please for an interview.

T F 6. In order to act natural and just "let things happen," do not prepare yourself for the interview.

T F 7. Do not place personal articles on the interviewer's desk.

T F 8. When introducing yourself you should speak clearly and you should smile.

T F 9. Do not light up a cigarette until you have been seated for five minutes.

T F 10. It would be wise to bring a friend along to the interview to vouch for your character.

T F 11. Don't be critical of former employers.

T F 12. Play "hard to get" if you are offered the job, so that the employer will increase your wages.

T F 13. Prepare yourself to explain your interests in the company you are interviewing with.

T F 14. If your job application is not complete, your employer can help you fill it out at the time of the interview.

T F 15. If you are asked to take an employment test to measure your skills, your civil rights are being violated.

HOJA DE TRABAJO 3A

Llene la siguiente lista de "Debe" y "No debe" de acuerdo con la categoría de los encabezamientos. Trate de hacerlo sin la ayuda de ningún material de estudio, pero puede usarlos si necesita refrescar su memoria.

DEBE	NO DEBE
Vestido: 1. 2.	Vestido: 1. 2.
Dicción y uso del inglés 1. 2.	Dicción y uso del inglés 1. 2.
Los comentarios que Ud. haga 1. 2.	Los comentarios que Ud. haga 1. 2.
Las preguntas que Ud. haga 1. 2.	Las preguntas que Ud. haga 1. 2.

WORKSHEET 3A

Fill in the following list of "Do's and Don'ts" according to the category headings. Try to do this without resources, but you may use resources to refresh your memory.

DO	DON'T
Dress: 1. 2.	Dress: 1. 2.
Speech & English 1. 2.	Speech & English 1. 2.
Comments for you to make 1. 2.	Comments for you to make 1. 2.
Questions for you to ask 1. 2.	Questions for you to ask 1. 2.

HOJA DE TRABAJO 4A

Ud. tiene una entrevista para un trabajo mañana por la mañana a las 8:00.

1. Identifique el nombre, título o cargo de su entrevistador.

   Aunque generalmente Ud. será incapaz de hacer esto en su clase, recuerde que es algo muy importante que debería hacer con antelación a cualquier entrevista. ¿De qué modo obtendrá Ud. esa información?

2. Conteste a preguntas preliminares.

   Las entrevistas normalmente empiezan con un tipo de preguntas bastante común. Si Ud. las piensa con anterioridad y especialmente si las ha ensayado en voz alta, aumentará su confianza y hará que la entrevista siga su curso con más suavidad.

   Piense largamente en cada una de las siguientes preguntas. Escriba una seria respuesta a cada una de ellas.

   "Háblame de sí mismo".
   Mencione las cosas acerca de sí mismo que Ud. crea interesarán a su entrevistador. Incluya las estadísticas vitales - que Ud. está casado o soltero; que está graduado en cierto curso. Relaciónese a Ud. mismo con el trabajo cuanto más posible.

WORKSHEET 4A

You have a job interview tomorrow morning at 8:00.

1. Identify the name, title, or job functions of your interviewer.

   While you are generally unable to do this in a classroom situation, know that it is something you should do before any interview. How will you go about finding out this information?

2. Answer "opening questions."

   Interviews may begin with a fairly common pattern of questioning. If you have thought about the questions ahead of time, and especially if you have rehearsed the answers out loud, it will increase your self-confidence and cause the interview to go more smoothly.

   Give considerable thought to each of the questions below. Write a serious reply to each question.

   "Tell me about yourself."
   Tell the things about yourself that you think the interviewer wants to know. Include some of the vital statistics: you are married or single; you are a graduate of some course. Relate as much about yourself to the job as you can.

"¿Por qué está Ud. interesado en esta compañía?" Describa el interés que le inspira el trabajo. Averigüe cuanto pueda de la compañía.

"¿Qué tipo de trabajo le gusta más?

"¿Tiene Ud. planes de continuar su educación?" ¿Por qué? o ¿por qué no?

3. Prepare sus propias preguntas.

   Haga una lista de 5 preguntas que Ud. hará al entrevistador sobre el trabajo, la compañía, los beneficios, horas, sueldo, etc.

4. Haga una lista de los artículos que debe llevar consigo al ir a una entrevista.

   Asegúrese de que lleva consigo los siguientes artículos cuando vaya a una entrevista.

   A. Formulario de solicitud de empleo, completado y en forma correcta. Puede usar el examen final del Módulo 9.
   B. Curriculum vitae. Puede usar el examen final del Módulo 10.
   C. Tarjeta o número del seguro social.
   D. Bolígrafo o lápiz. Si Ud. tiene la oportunidad de anotar datos, demostrará que es Ud. una persona interesada y organizada.

"Why are you interested in this company?" Describe the interest the job has for you. Know as much about the company as you are able to find out.

"What type of work do you like best?"

"Do you plan to continue your education? Why or why not?"

3. Prepare your own questions.

   Make a list of 5 questions that you will ask the interviewer about the job, company, benefits, hours, salary, etc.

4. Make a list of items to take with you to the interview.

   Be certain that you have the following items with you at the time of your interview:

   A. Job application form, correct and complete. You may use your posttest to Module 9.
   B. Résumé. You may use your posttest to Module 10.
   C. Social security card or number.
   D. Pen or pencil. If you have the chance to write something down, it will indicate that you are interested and organized.

HOJA DE TRABAJO 5A

A. La carta de apreciación debería enviarse al día siguiente de la entrevista. Su propósito es mostar apreciación por haber sido entrevistado. No necesita decir mucho, pero si existe alguna indecisión en cuanto cuál de los solicitantes será seleccionado, la carta de apreciación puede ser el grano de arena que mueva la balanza a su favor.

Ud. puede usar el Módulo 8 como referencia del formato y estilo que debe seguir su carta. El contenido debería incluir la siguiente información:

Párrafo 1 - Déle las gracias a la persona que lo entrevistó. Asegúrese de incluir la fecha y hora en que tuvo lugar la entrevista y mencione el trabajo por el cual fue entrevistado, para que el entrevistador le recuerde. También puede referirse a algo en especial que fue mencionado, si Ud. cree que le ayudará a ser identificado. Recuerde que un director de personal o la persona que conduce las entrevistas ve muchas personas cada día.

Párrafo 2 - Resuma brevemente sus calificaciones en lo que se relacionan al trabajo por el que fue entrevistado. Muestre su interés en trabajar para esa firma en particular.

Párrafo 3 - Dígale a su entrevistador que está ansioso de saber si la compañía le considera calificado para el trabajo. Una vez más, ponga su número de teléfono. No necesita escribir aquí su dirección porque ya estará escrita en la parte superior de la página, donde debe colocarse la dirección del remitente.

El cierre apropiado de esta carta es, simplemente, "Sinceramente" o "Sinceramente suyo."

B. Suponga que se acaba de entrevistar con el Sr. Carlos Argüello, Director de Personal en la compañía Flint Paper Products. Ud. fue entrevistado para el trabajo de operador de teclas de computadora. El Sr. Argüello lo llevó por toda la fábrica para enseñarle la manera en que se fabrica el papel. Escriba una carta de apreciación al Sr. Argüello usando el formulario que encontrará en la página siguiente. La dirección de la compañía es Flint Paper Products, 113 East 11th, Mt. Carmel, Illinois 61113. La fecha es 1 de febrero, 1976.

WORKSHEET 5A

A. The follow-up letter should be sent the day after the interview. Its purpose is to show appreciation for an interview. It needn't say much, but if there is some indecision as to which applicant will be selected, the follow-up letter may swing the balance in your favor.

You may use Module 8 as a reference for the form and style of setting up your letter. The content of your letter should include the following information:

Paragraph 1 - Thank the person who interviewed you. Be sure to include the date, time of day, and job for which you interviewed so that the interviewer will remember you. You may even refer to some unusual bit of information you discussed if you think it would help to identify you. Remember that a personnel director or a person who conducts interviews sees many people.

Paragraph 2 - Summarize briefly your qualifications as they relate to the job for which you interviewed. Show your interest in working for that particular business.

Paragraph 3 - Tell the interviewer that you are eager to hear from the company if, in their opinion, you qualify for the job. Again, give your telephone number. You need not give your address here, because it will be at the top of the page where you have written your return address.

"Sincerely" or "Sincerely yours" is an appropriate complimentary close for your letter.

B. You have just interviewed with Carlos Arguello, Director of Personnel at Flint Paper Products. You interviewed for a job as keypunch operator. Mr. Arguello took you on a tour of the plant to show you how paper is made. Write a follow-up letter to Mr. Arguello using the form on the following page. The address of Flint Paper Products is 113 East 11th, Mt. Carmel, Illinois 61113. The date is February 1, 1976.

FORMULARIO DE EVALUACION 6A

Presentación

	Sí	No
El solicitante debe presentarse a sí mismo	☐	☐
Debe indicar el trabajo que solicita	☐	☐

Apariencia Personal

	Sí	No		Sí	No
Apariencia facial apropiada	☐	☐			
Cabello aseado	☐	☐	Ropa apropiada	☐	☐
Uñas limpias, arregladas	☐	☐	Ropa limpia y planchada	☐	☐

Preguntas

	Respuesta: excelente	buena	normal	pobre
a. "Háble me de sí mismo"	☐	☐	☐	☐
b. "¿Por qué cree Ud. que está calificado para este trabajo?"	☐	☐	☐	☐
c. "Qué tipo de trabajo le gusta más?"	☐	☐	☐	☐
d. "¿Piensa Ud. continuar su educación? y ¿por qué y por qué no?"	☐	☐	☐	☐

Artículos traídos a la Entrevista

	Sí	No
Solicitud de empleo - completada	☐	☐
Tarjeta del Seguro Social	☐	☐
Curriculum vitae u hoja de datos personales	☐	☐
Bolígrafo y papel	☐	☐

Gramática y Dicción

	Sí	No
El solicitante habló claramente.	☐	☐
El solicitante usó el inglés correctamente.	☐	☐

¿Preguntó el solicitante 5 preguntas acertadas acerca del trabajo?

EVALUATION FORM 6A

Introduction

	Yes	No
Applicant introduced self.	☐	☐
Stated job being applied for	☐	☐

Grooming of Applicant

	Yes	No
Appropriate facial grooming	☐	☐
Hair trimmed	☐	☐
Finger nails clean, trimmed	☐	☐

	Yes	No
Appropriate clothing	☐	☐
Clothing clean & pressed	☐	☐

Questions

	Response: excellent	good	fair	poor
a. "Tell me about yourself."	☐	☐	☐	☐
b. "Why do you think you're qualified for this job?"	☐	☐	☐	☐
c. "What type of work do you like best?"	☐	☐	☐	☐
d. "Do you plan to continue your education, and why or why not?"	☐	☐	☐	☐

Items Brought to Interview

	Yes	No
Job application - completed	☐	☐
Social security card	☐	☐
Résumé or personal data sheet	☐	☐
Pen and pencil	☐	☐

Grammar and Voice

	Yes	No
Applicant spoke clearly.	☐	☐
Applicant used correct English.	☐	☐

	Yes	No
Did the applicant ask 5 good questions about the job?	☐	☐

HOJA DE TRABAJO 6A-2

Haga todos los ejercicios de esta hoja de trabajo en un cuaderno de escribir.

Mucha gente al hablar en inglés, hace los errores que verá en la página opuesta. Todas esas expresiones son INCORRECTAS.

A. Tache las palabras que sean innecesarias en las oraciones de la página opuesta. La primera oración ha sido corregida como ejemplo.

B. Tache la palabra incorrecta y escriba en su lugar la que sea correcta. Una de ellas ha sido corregida como ejemplo.

WORKSHEET 6A-2

Avoiding Common Mistakes

Do all exercises on this worksheet on notebook paper.

1. this these them those

Many people make the following mistakes in speaking:

this here hammer
those there nails
that there toolbox
these here blueprints
them there forms

The above expressions are WRONG.

Never say this here hammer, them there forms.
Never say these here blueprints, those there nails.

Do not add	here or there	to	there this that these those

A. Remove the uncessary words from the sentences below by drawing a line through the unneccesary words. One is done for you.

1. This here drill is not working.
2. Hand me those there nails.
3. Now, these here blueprints are wrong.
4. That there is the worst cement job I've ever seen.
5. That there is an interesting book.
6. This here is my boy.

Never say them people, them hours.

The words these and those are used to answer the question, "Which ones?"

Set those groceries on the cabinet.
Hand those papers to Mr. Vasquez.

B. Cross out the incorrect word, and write the correct word above. One has been done for you.

En inglés, igual que en español, se hacen muchos errores comunes al hablar. En la página opuesta y en las siguientes verá muchos ejemplos de oraciones que son INCORRECTAS. También las verá en su forma correcta. Estudie las explicaciones y haga los ejercicios correspondientes.

Those
1. ~~Them~~ kids are going to get hurt.
2. I have never cared for them people.
3. Pass me them cookies, please.
4. The boys drew them pictures.
5. Where did you get them boots?

2. see saw seen

More common mistakes in speaking are made with the word seen.

I seen the car go by.
He seen the movie.

The above sentences are WRONG.

Seen must always have a helping word (has, have, had) with it.

I had seen the car go by
He has seen the movie.

or

I saw the car go by.
He saw the movie.
(All of these sentences tell about something that happened in the past.)

See is used to show what is happening now.

I see the house from here.
I see the man.

A. Use see, saw, or seen in these sentences.

1. I _____ her as she ran from the room.
2. Have you _____ that orange sports car?
3. Let me know when you _____ Laura coming.
4. He had _____ the big bird several times.
5. Jack _____ to it that the door was locked.

3. know knew

Here are some common mistakes made in speaking:

I knowed it was going to happen.
Did you knew him?

The above sentences are WRONG.

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The word know tells what is happening now. The word knew tells what has happened in the past.

I know my lesson today.
You knew your lesson yesterday.

A. Write knew or know in the sentences .

1. Carlotta _____ the circus was in town.
2. Does Robert _____ he is due at the club in 5 minutes.
3. Who really _____ the cause of his death?
4. Juan said he never _____ such a lazy child.
5. You _____ it was going to happen and yet you just stood there.

4. ain't

THIS WORD IS NOT ACCEPTABLE.

It is used so often that you may think that it's okay, but it isn't.

Read these.

Wrong	Right
I ain't finished yet.	I haven't finished yet.
He ain't going.	He is not going.
Joe ain't coming here.	Joe isn't coming here.
Sally ain't done it right yet.	Sally hasn't done it right yet.

5. not no

Never use not and no in the same sentence. Never say isn't no or aren't no. Never say hasn't no or haven't no.

Below are some very common mistakes.

That man hasn't no time right now.
The basketball team didn't make no errors.
The instructor did not give them no homework.

The above sentences are WRONG.

Use the word any after the word not.

There are not any staples left.

A. Put the correct word, <u>any</u> or <u>no</u>, in the blanks.

1. We do not have _____ time for that.
2. There is _____ way out of here.
3. George has _____ money left.
4. She didn't have _____ time to call Claudio.
5. I told you that you couldn't buy _____ clothes.

LEARNING RESOURCE 7A

Beating the board*—

*This article is taken from *The Fort Hood Sentinel*.

a guide for promotion

Rules to get-ahead by

BY CAROL NELSON

You've done well on the job, put in your time and you have your CO's backing. If you're an E4 or E5, there's more to the story: a promotion board.

Before you can sew on the new stripes, you'll have to appear in front of a panel of officers and senior NCO's who will take a look at your records and an even longer look at you. A little knowledge of what to expect can go a long way in controlling heart palpitations and sweaty palms. We talked with board presidents, as well as "befores" and "afters" (those still awaiting a board appearance and those who have already been through it) for a run down—

THE BOARD ITSELF

... Will normally be made up of about five people, more or less depending on the unit. The senior officer will act as president: his function will be to coordinate questions from the board members. As a prospective promotee, you will knock for admittance, walk in and come to attention immediately in front of the president, salute and report in. He'll return your salute and direct you to a chair.

From there on, it's all down hill . . . you'll usually have a few minutes to compose yourself by talking informally about yourself and your Army background. This will allow the board to look at your uniform and watch your bearing and how you express yourself.

THINK BEFORE YOU SPEAK

Of the total 250 points you can pick up from the board, 60 are involved in personal appearance, self confidence and conversational skill, so look sharp and put your words together thoughtfully.

Stick to the point, too - answer each question fully and to the best of your knowledge but don't wander off the subject or guess at something you don't know. The board would prefer to hear an honest "I don't know" than two minutes of fancy verbal footwork. While we're discussing your answers - it's a good idea to rack on the appropriate board member's rank as you reply to his question, such as "sir, sergeant," or "specialist," and be sure to look at the person when answering. Have confidence in yourself and in your answers.

QUESTION CATEGORIES

Each of the other board members will be delegated questions in general areas - notably world and national affairs and general military knowledge. To prepare for these questions, which may range from asking the name of the COSCOM or post commander to the proper method of treating wounds or safeguarding classified information, the following should be helpful to study:

NEWS

Local newspapers (headline items, including sports), TV and radio newscasts, news magazines, and publications like ARMY TIMES or SOLDIERS.

GENERAL

A review of "basic soldiering" subjects is in order and you will benefit from rereading TMs and FMs covering first aid, weapons, camouflage, map reading, leadership, chemical/biological/nuclear warfare, drill and ceremonies, and military customs and courtesies. Some units have put together a consolidated study guide covering these areas, plus sample questions, but if you aren't fortunate in having one, your first sergeant, platoon sergeant or training NCO should be able to get you all the training references you'll need.

Pulling off a successful board showing means preparation - you can't walk in cold and expect to impress anyone. As soon as you're notified, hit the books, start thinking about what's happening in the news. Today's soldier is supposed to fit into the overall scheme of things within the Army and the world.

The very fact that you're sent before a board is some proof of your job proficiency and the belief your supervisors have that you can handle the next rank. There will also be MOS-related questions to test your grasp of your MOS. Since being promoted brings a change in leadership relationships, you may be hit with "thought" questions to get you thinking about handling people situations.

A big chunk of points goes for an "overall consideration" of extra goodies lurking in your files - honors for class standings at service schools, selection as soldier of the month, letters of commendation and the like. On the flip side, if there are records in the folder on counseling sessions or Article 15s, these will be weighed against what you've accomplished since the put-down.

Your efforts at self-improvement will also be checked as evidence that your brain is still alive and learning from advanced training, leadership schools, correspondence courses, high school equivalency or college.

As one promotion board president sums it up, "Promotion boards serve the Army's interest and the individual's interest. If we promote an unqualified or unprepared person, we've done everyone a disservice."

EVALUACION PROPIA 2A: HOJA DE RESPUESTAS CORRECTAS

1. Falso — No se excuse por falta de experiencia.
2. Falso — Es suficiente con una breve discusión hacia el final de la entrevista.
3. Verdad
4. Falso — No discuta sus problemas personales.
5. Falso — Trate de averiguar lo que es apropiado.
6. Falso — Vaya bien preparado.
7. Verdad
8. Verdad
9. Falso — No fume en absoluto.
10. Falso — Vaya a la entrevista solo.
11. Verdad
12. Falso — Sea honesto.
13. Verdad
14. Falso — Su formulario de solicitud debería estar completamente rellenado antes de la entrevista.
15. Falso — Es tan sólo para ayudar a determinar si Ud. tiene los conocimientos necesarios para el trabajo.

SELF-ASSESSMENT 2A: ANSWER KEY

1. False Do not apologize for lack of experience.
2. False A brief discussion near the end of the interview is enough.
3. True
4. False Do not discuss personal problems.
5. False Look or ask around to determine what is appropriate.
6. False Be well prepared.
7. True
8. True
9. False Do not smoke at all.
10. False Go to the interview alone.
11. True
12. False Don't play games at all. Be honest.
13. True
14. False Your job application should be completely filled in before the interview.
15. False This is to help determine if you have the skills necessary for the job.

WORKSHEET 6A-2: ANSWER KEY

1.

A.
1. This here drill is not working.
2. Hand me those there nails.
3. Now, these here blueprints are wrong.
4. That there is the worst cement job I've ever seen.
5. That there is an interesting book.
6. This here is my boy.

B.
1. ~~Them~~ Those kids are going to get hurt.
2. I have never cared for ~~them~~ those, these people.
3. Pass me ~~them~~ those cookies, please.
4. The boys drew ~~them~~ these, those pictures.
5. Where did you get ~~them~~ these, those boots?

2.

A.
1. saw
2. seen
3. see
4. seen
5. saw

3.

A.
1. knew
2. know
3. knew
4. knew
5. knew

4.

A.
1. any
2. no
3. no
4. any
5. any

EXAMEN FINAL

Equipo y Materiales: Las preguntas del examen, formulario de evaluación de la entrevista
Referencias: Ninguna
Tiempo Límite: Sección A - 30 minutos
Sección B - ninguno
Sección C - 30 minutos

Instrucciones:

Ud. tendrá 5 minutos para repasar estas instrucciones y el Formulario de Evaluación de la Entrevista.

Proceda como se le indica a continuación:

1. Conteste las preguntas y entrégueselas a su instructor.

2. Pida su entrevista.

3. Escriba una carta de agradecimiento a continuación de la entrevista.

Evaluación:

Se contestará correctamente a las preguntas o no se concederá la entrevista.

Ud. deberá obtener una nota de 70 puntos o más en el formulario de evaluación de la entrevista.

Su carta de agradecimiento deberá tener un formato y gramática correctos.

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POSTTEST

Equipment and Materials:	Test questions, interview evaluation forms
References:	None
Time Limit:	Part A - 30 minutes Part B - none Part C - 30 minutes

Instructions:

You will have 5 minutes to review these instructions and the Interview Evaluation Form.

Proceed as follows:
1. Answer the questions and hand them to your instructor.
2. Ask for your interview.
3. Write a follow-up letter following your interview.

Evaluation:

The questions must all be answered correctly or the interview will not be given.
You must receive a 70 or above on the interview evaluation form.
Your follow-up letter must be correct in format and grammar.

1. ¿Cuáles son los propósitos de una entrevista? Nombre dos.

2. ¿Qué es lo que "debe hacerse" y lo que "no debe hacerse" en una entrevista para un trabajo? Mencione cinco.

3. ¿Cuál es el propósito de una carta de agradecimiento y de qué modo le ayuda esta carta?

Posttest, page 2

1. What are the purposes of an interview? Name two.

2. What are some "do's and don'ts" of a job interview? List five.

3. What is the purpose of a follow-up letter and how can it help you?

FORMULARIO DE EVALUACION DE LA ENTREVISTA

Lista de Apariencia Ponga un círculo alreadedor de la nota obtenida.	Sí	No	Comentarios A compartir con el estudiante.
apariencia facial apropiada	2	0	_____
cabello bien peinado	2	0	_____
necesita corte de pelo	0	2	_____
peinado en estilo extremado	0	2	_____
manos limpias	2	0	_____
uñas, limpias y arregladas	2	0	_____
vestido, limpio y planchado	2	0	_____
vestido apropiado	2	0	_____
zapatos, limpios	2	0	_____
postura, buena	2	0	_____
			Resultado _____

Voz y Gramática Ponga un círculo alreadedor de la nota obtenida.			
habló claramente	2	0	_____
se expresó bien	2	0	_____
usó gramática correcta	2	0	_____
			Resultado _____

Preguntas (por el entrevistador) Ponga un círculo alrededor de la nota obtenida.	Respuesta: excelente	buena	regular	pobre
a. "Háblame de sí mismo"	3	2	1	0
b. "¿Por qué cree Ud. que está calificado para este trabajo?"	3	2	1	0
c. "¿Qué tipo de trabajo le gusta más?"	3	2	1	0
d. "¿Piensa Ud. continuar su educación?" (Por qué o por qué no)	3	2	1	0
			Resultado	_____

Preguntas Acerca del Trabajo (por el solicitante)
Ponga un círculo alrededor del número de preguntas hechas. (1 punto cada una) 0 1 2 3 4 5
Añada estos puntos de bonificación

Preguntó acerca de las horas /condiciones de trabajo	2
Salario	2
Responsabilidades	2
Oportunidades	2
	Resultado _____

INTERVIEW EVALUATION FORM

Appearance Checklist Circle the rating earned.	Yes	No	Remarks To be shared with student
appropriate facial appearance	2	0	
hair combed neat	2	0	
needs haircut	0	2	
hair in extreme style	0	2	
hands clean	2	0	
fingernails, clean & trimmed	2	0	
clothing, clean & pressed	2	0	
clothing appropriate	2	0	
shoes, clean	2	0	
posture, good	2	0	

Score_____

Voice and Grammar Circle the rating earned.	Yes	No	
spoke clearly	2	0	
expressed self well	2	0	
used correct grammar	2	0	

Score_____

Questions (by interviewer) Circle the rating earned.	Response: excellent	good	fair	poor
a. "Tell me about yourself."	3	2	1	0
b. "Why do you think you're qualified for this job?"	3	2	1	0
c. "What type of work do you like best?"	3	2	1	0
d. "Do you plan to continue with your education?" (Why or why not?)	3	2	1	0

Score_____

Questions (by applicant) about Job
Circle the number of questions asked (1 point each) 0 1 2 3 4 5
Add these bonus points:

Asked about hours/working conditions?	2
Salary	2
Duties	2
Opportunities	2

Score_____

Conducta en General en la Entrevista Ponga un circulo alrededor de la nota obtenida.	Sí	No	Comentarios
puntual	6	0	
tranquilo	2	0	
fumó	0	2	
cortés	2	0	
seguro de sí mismo	2	0	
buena actitud	2	0	
alerta	2	0	
miró directo a los ojos	4	0	

Resultado _____

Lista de Artículos Traídos a la Entrevista

1. Formulario de Solicitud de Empleo, completo ____
2. Tarjeta o Número del Servicio Social ____
3. Curriculum Vitae u Hoja de Servicios ____
4. Bolígrafo y /o lápiz ____

Créditos Solamente por Todos. (12 puntos ó 0) Resultado _____

Añada estos puntos para indicar la preparación general del solicitante.

excelente	buena	regular	pobre
15	10	5	0

Resultado _____

Resultado		Resultado del solicitante
Apariencia	total 20	
Voz y Gramática	total 6	
Preguntas (por el entrevistador)	total 12	
Preguntas (por el entrevistado)	total 13	
Conducta en la Entrevista	total 22	
Lista de Artículos	total 12	
Preparación General	total 15	

Resultado 100 _____

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Posttest, page 4

General Interview Behavior Circle rating earned.	Yes	No	Remarks
prompt	6	0	_____
relaxed	2	0	_____
smoked	0	2	_____
polite	2	0	_____
confident	2	0	_____
good attitude	2	0	_____
attentive	2	0	_____
made eye contact	4	0	_____

score_____

Checklist of Items Brought to Interview

1. Job Application Form completed ____
2. Social Security Card or Number ____
3. Résumé or Personal Data Sheet ____
4. Pen and/or Pencil ____

Credit for all four only. (12 points or 0) score_____

Add these points to indicate general preparedness of applicant.

excellent	good	fair	poor
15	10	5	0

score_____

Scoring			applicant's score
Appearance	total	20	_____
Voice & Grammar	total	6	_____
Questions (by interviewer)	total	12	_____
Questions (by applicant)	total	13	_____
Interview Behavior	total	22	_____
Checklist of Items	total	12	_____
General Preparedness	total	15	_____
			----------
		total 100	_____

APPENDIX D

Occupational Knowledge Assessment Test

OCCUPATIONAL KNOWLEDGE ASSESSMENT TEST

#1 THIS IS A SIGN ON THE BULLETIN BOARD OF THE BIG COMPANY.

Read to students as many times as necessary

SLIDE 1

BIG COMPANY
WE ARE AN
EQUAL OPPORTUNITY EMPLOYER

SELECT WHAT THIS SIGN MEANS: A, B, C, OR D.

SLIDE 2

A. YOU DON'T HAVE TO MEET THE REQUIREMENTS OF A JOB TO APPLY FOR IT.
B. ALL PEOPLE WORKING IN THE COMPANY ARE GIVEN EQUAL CONSIDERATION.
C. JOB APPLICATIONS WILL BE CONSIDERED WITHOUT REGARD TO RACE, CREED, SEX, OR NATIONAL ORIGIN.
D. DISCRIMINATION HAS NOT OCCURRED WITHIN THE COMPANY.

Read to students

#2. JOEL IS 47 YEARS OLD. HE'S MARRIED AND HAS THREE CHILDREN TO SUPPORT.

SLIDE 3

JOEL
- 47 YEARS OLD
- MARRIED
- 3 CHILDREN

Read to students

IN CHOOSING A JOB, WHICH ONE OF THE FOLLOWING DO YOU THINK JOEL WOULD THINK MOST IMPORTANT?

SLIDE 4

A. LITTLE EXPERIENCE IS REQUIRED.
B. HIGH COMMISSIONS ARE POSSIBLE.
C. GROUP MEDICAL PLAN IS OFFERED.
D. JOB SECURITY IS GOOD.

Read to students

#3. SLIDE 5 JUAN EARNS $3.00 AN HOUR AND WORKS A 40-HOUR WEEK. HE IS PAID TIME-AND-A-HALF FOR OVERTIME WORK. HOW MUCH WOULD HE EARN IF HE WORKED 45 HOURS ONE WEEK?

Read to students

#4 LOOK AT THIS STATEMENT OF EARNINGS. .... NOW ANSWER THESE QUESTIONS:

SLIDE 6

Zapata, Carlos E.

RETAIN THIS STATEMENT FOR USE IN PREPARING YOUR INCOME TAX RETURNS

BIG THREE RESTAURANTS,

STATE	DEPT.	JOB LOC.	SOCIAL SECURITY NO.	INCL. EX	PAY PERIOD
59	801	002	463-66-5604	M 1	12/01/75 - 12/31/75

	PAY CODE	OCCUPATION CODE	RATE		HOURS	GROSS AMOUNT
REGULAR PAY	10	86142			160	413.25

LIFE INS. PLAN	SURVIVOR'S INS.	DISAB. INC. PLAN	MEDICAL PLAN	PROFIT SHARING	SAVINGS ACC. INS.	OTHER MED. PLAN	ADVANCE CHECK	TOTAL HOURS	GROSS EARNINGS
			29.80					160	413.25

MEALS, LAUNDRY	UNION DUES	CREDIT UNION	SAVINGS BOND	CHARITY	MTY EQ. LOAN	NOTES REC.	ACCTS. REC.		

MISC. 1	MISC. 2	FED. W/H TAX	STATE W/H TAX	CITY W/H TAX	FICA TAX	STATE DIS. INS.		TOTAL DEDUCTIONS
		59.83			21.48			111.1

YEAR TO DATE TOTALS ▶	GROSS EARNINGS	FED. W/H TAX	STATE W/H TAX	CITY W/H TAX	FICA TAX	STATE DIS. INS.		NET AMOUNT
	4959.00	717.96	.00	.00	257.76	.00		302.1

FORM C-204s (REV. 3-74) PRINTED IN U.S.A.

Read to students

FOR THE MONTH OF DECEMBER:

A. WHAT WAS THE TOTAL AMOUNT OF MONEY DEDUCTED FROM CARLOS ZAPATA'S PAY?

B. HOW MUCH OF HIS PAY WAS DEDUCTED FOR INCOME TAX?

C. HOW MUCH WAS TAKEN OUT FOR SOCIAL SECURITY?

#5.

Read to students

SLIDE 7 BEFORE DEDUCTIONS, MR. GOMEZ'S MONTHLY PAYCHECK IS $500. EACH MONTH $120 IS TAKEN FROM HIS PAYCHECK FOR INCOME TAX AND $60 FOR SOCIAL SECURITY. WHAT IS MR. GOMEZ'S YEARLY TAKE-HOME PAY?

#6.

Read to students

SLIDE 8

YOU ARE JUANITA H. GONZALES, 19 YEARS OLD, AND YOU NEED TO APPLY FOR A SOCIAL SECURITY NUMBER. YOUR MOTHER'S NAME BEFORE SHE MARRIED WAS ALICIA MARIA JUAREZ AND YOUR FATHER IS NAMED LUIS CESAR HIDALGO. FILL OUT THE MISSING INFORMATION ON THE FORM.

Do not read this

ON ANSWER SHEET

ID CN DO 838

DO NOT WRITE IN THE ABOVE SPACE

APPLICATION FOR A SOCIAL SECURITY NUMBER

See instructions on Back. Print in Black or Dark Blue Ink or Use Typewriter.

1 Prior FULL NAME YOU WILL USE IN WORK OR BUSINESS (First Name) (Middle Name or Initial — if none, draw line ___) (Last Name)

2 Prior FULL NAME GIVEN YOU AT BIRTH Juanita Maria Hidalgo

3 PLACE OF BIRTH (City) San Antonio (County if known) Bexar (State) Texas

4 MOTHER'S FULL NAME AT HER BIRTH (Her maiden name)

5 FATHER'S FULL NAME (Regardless of whether living or dead)

6 YOUR DATE OF BIRTH (Month) (Day) (Year) 8 12 56

7 YOUR PRESENT AGE (Age on last birthday)

8 YOUR SEX MALE ☐ FEMALE ☒

9 YOUR COLOR OR RACE WHITE ☒ NEGRO ☐ OTHER ☐

10 HAVE YOU EVER BEFORE APPLIED FOR OR HAD A UNITED STATES SOCIAL SECURITY, RAILROAD, OR TAX ACCOUNT NUMBER? NO ☐ DON'T KNOW ☐ YES ☐ If "YES" Print STATE in which you applied and DATE you applied and SOCIAL SECURITY NUMBER if known

11 YOUR MAILING ADDRESS (Number and Street, Apt. No., P. O. Box, or Rural Route) 816 West Second Street (City) Austin (State) Texas (Zip Code) 78703

12 TODAY'S DATE Nov. 1, 1975

13 TELEPHONE NUMBER 397-7268

14 NOTICE: Whoever, with intent to falsify his or someone else's true identity, willfully furnishes or causes to be furnished false information in applying for a social security number, is subject to a fine of not more than $1,000 or imprisonment for up to 1 year, or both.

Sign YOUR NAME HERE (Do Not Print)

TREASURY DEPARTMENT Internal Revenue Service Form SS-5 (6-72) ☐ DISCREPANCY ☐ ASSIGN ☐ DUP ISSUED Return completed application to nearest SOCIAL SECURITY ADMINISTRATION OFFICE

#7.

Read this to students

SLIDE 9

"OPEN SHOP" MEANS:

A. CUSTOMERS CAN SHOP HERE WITHOUT A MEMBERSHIP CARD.

B. NO ONE HAS TO JOIN A UNION.

C. PERSONS OF ANY RACE CAN WORK HERE.

D. THE SHOP STAYS OPEN 24 HOURS A DAY.

Read this to students

#8. FRANCES CORTEZ TOOK A VOCATIONAL APTITUDE TEST. HER HIGHEST SCORES WERE IN CLERICAL AND COMPUTATIONAL WORK. SELECT THE JOB WHICH WOULD INTEREST HER MOST.

SLIDE 10

FRANCES CORTEZ: HIGH SCORES IN CLERICAL AND COMPUTATIONAL WORK.

Read this to students

SLIDE 11

A. RECEPTIONIST
B. PAYROLL CLERK
C. STENOGRAPHER
D. COURTROOM CLERK

Read this to students

#9. ROBERTO FLORES WANTS AN INSIDE DESK JOB. HE HAS COMPLETED 2 YEARS IN HIGH SCHOOL AND IS GOOD IN MATH. HE ALSO TOOK BUSINESS COURSES. WHICH AD SHOULD HE ANSWER?

SLIDE 12

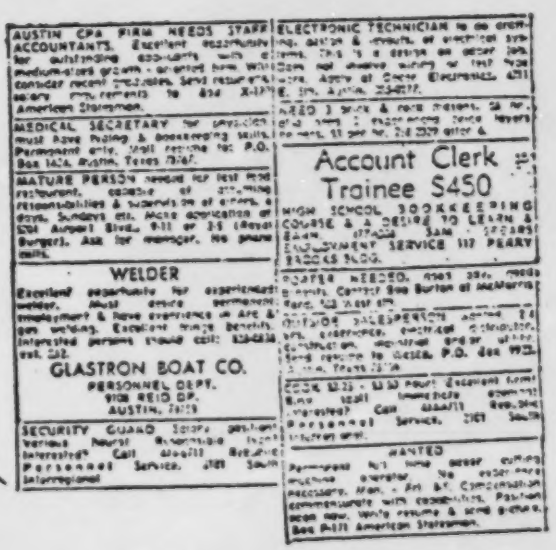
ROBERTO FLORES

- HAS 2 YEARS HIGH SCHOOL
- GOOD IN MATH
- HAS TAKEN BUSINESS COURSES

Do not read this

ON ANSWER SHEET

A
B
C
D
B



F
G
H
I
J
K
L

LOOK AT YOUR ANSWER SHEET. THE ADS ARE LABELED A THROUGH L. CHOOSE THE ONE THAT MR. FLORES SHOULD ANSWER.

#10

Read to students

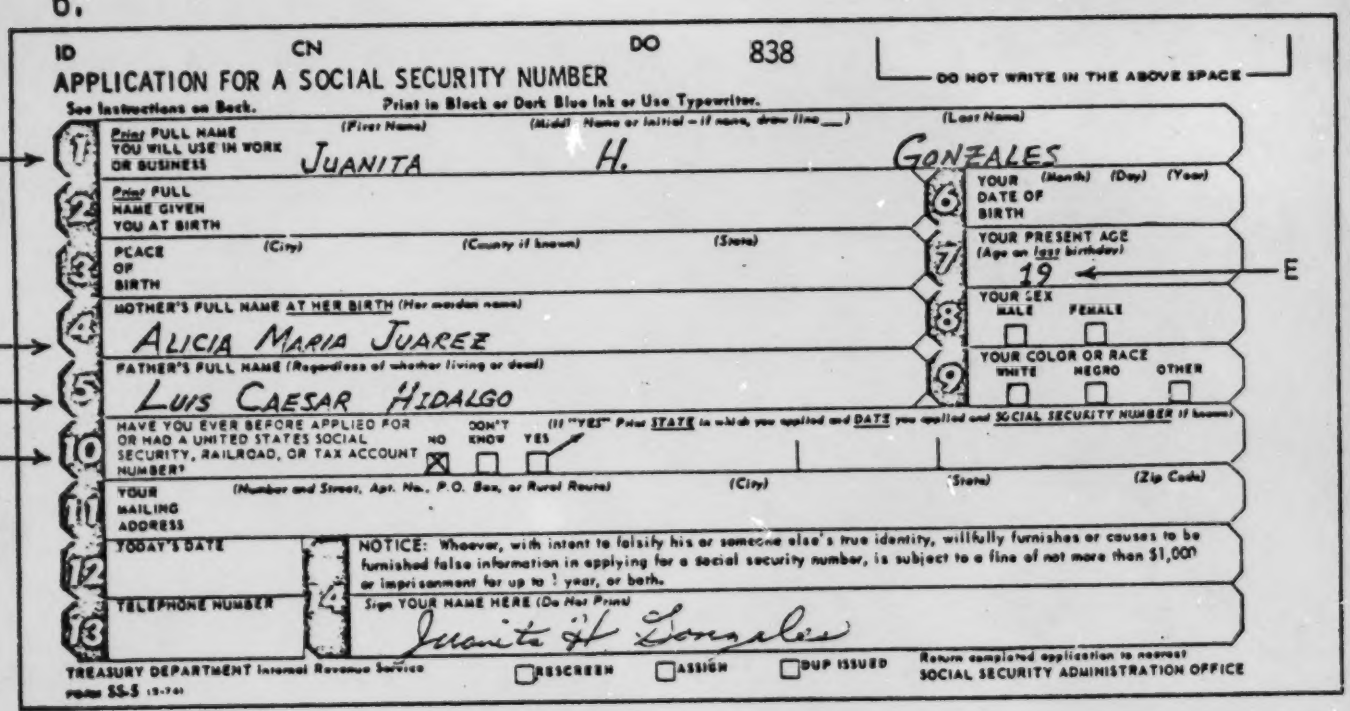
SLIDE 13

THE OK EMPLOYMENT AGENCY CHARGES A FEE OF 5% OF THE ANNUAL SALARY OF EACH PERSON FOR WHOM THEY FIND A JOB. THEY FOUND MR. CASTRO A JOB WITH A SALARY OF $9,000 PER YEAR. MR. CASTRO WANTS TO PAY $50 PER MONTH. HOW MANY MONTHS WILL IT TAKE HIM TO PAY THE AGENCY'S FEE, DISREGARDING ANY INTEREST?

OCCUPATIONAL KNOWLEDGE ASSESSMENT TEST

ANSWER KEY

1. C
2. D
3. $142.50
4. A. $111.11
   B. 59.83
   C. 21.48
5. $3840
6.



ID CN DO 838

APPLICATION FOR A SOCIAL SECURITY NUMBER — DO NOT WRITE IN THE ABOVE SPACE

See Instructions on Back. Print in Black or Dark Blue Ink or Use Typewriter.

1 Print FULL NAME YOU WILL USE IN WORK OR BUSINESS (First Name) JUANITA (Middle Name or Initial – if none, draw line ___) H. (Last Name) GONZALES

2 Print FULL NAME GIVEN YOU AT BIRTH

3 PLACE OF BIRTH (City) (County if known) (State)

4 MOTHER'S FULL NAME AT HER BIRTH (Her maiden name) ALICIA MARIA JUAREZ — B

5 FATHER'S FULL NAME (Regardless of whether living or dead) LUIS CAESAR HIDALGO — C

10 HAVE YOU EVER BEFORE APPLIED FOR OR HAD A UNITED STATES SOCIAL SECURITY, RAILROAD, OR TAX ACCOUNT NUMBER? NO ☒ DON'T KNOW ☐ YES ☐ (If "YES" Print STATE in which you applied and DATE you applied and SOCIAL SECURITY NUMBER if known) — D

11 YOUR MAILING ADDRESS (Number and Street, Apt. No., P.O. Box, or Rural Route) (City) (State) (Zip Code)

12 TODAY'S DATE

13 TELEPHONE NUMBER

14 NOTICE: Whoever, with intent to falsify his or someone else's true identity, willfully furnishes or causes to be furnished false information in applying for a social security number, is subject to a fine of not more than $1,000 or imprisonment for up to 1 year, or both.

Sign YOUR NAME HERE (Do Not Print) Juanita H Gonzales

6 YOUR DATE OF BIRTH (Month) (Day) (Year)

7 YOUR PRESENT AGE (Age on last birthday) 19 — E

8 YOUR SEX MALE ☐ FEMALE ☐

9 YOUR COLOR OR RACE WHITE ☐ NEGRO ☐ OTHER ☐

TREASURY DEPARTMENT Internal Revenue Service FORM SS-5 (3-74) ☐ RESCREEN ☐ ASSIGN ☐ DUP ISSUED Return completed application to nearest SOCIAL SECURITY ADMINISTRATION OFFICE

7. B
8. B
9. H (ACCOUNT CLERK TRAINEE)
10. 9 MONTHS

16 Total Answers

No. Correct	APL Score
1 - 9	1
10 - 13	2
14 - 16	3

NAME_____

OCCUPATIONAL KNOWLEDGE ASSESSMENT TEST

ANSWER SHEET

1. ___A ___B ___C ___D
2. ___A ___B ___C ___D
3. $_____
4. A. $_____
   B. $_____
   C. $_____
5. $_____
6.

ID CN DO 838

APPLICATION FOR A SOCIAL SECURITY NUMBER

DO NOT WRITE IN THE ABOVE SPACE

See Instructions on Back. Print in Block or Dark Blue Ink or Use Typewriter.

1. Print FULL NAME YOU WILL USE IN WORK OR BUSINESS (First Name) (Middle Name or Initial – if none, draw line ___) (Last Name)
2. Print FULL NAME GIVEN YOU AT BIRTH — Juanita Maria Hidalgo
3. PLACE OF BIRTH (City) San Antonio (County if known) Bexar (State) Texas
4. MOTHER'S FULL NAME AT HER BIRTH (Her maiden name)
5. FATHER'S FULL NAME (Regardless of whether living or dead)
6. YOUR DATE OF BIRTH (Month) (Day) (Year) — 8 12 56
7. YOUR PRESENT AGE (Age on last birthday)
8. YOUR SEX — MALE ☐ FEMALE ☒
9. YOUR COLOR OR RACE — WHITE ☒ NEGRO ☐ OTHER ☐
10. HAVE YOU EVER BEFORE APPLIED FOR OR HAD A UNITED STATES SOCIAL SECURITY, RAILROAD, OR TAX ACCOUNT NUMBER? NO ☐ DON'T KNOW ☐ YES ☐ (If "YES" Print STATE in which you applied and DATE you applied and SOCIAL SECURITY NUMBER if known)
11. YOUR MAILING ADDRESS (Number and Street, Apt. No., P.O. Box, or Rural Route) 816 West Second Street (City) Austin (State) Texas (Zip Code) 78703
12. TODAY'S DATE — Nov. 1, 1975
13. TELEPHONE NUMBER — 397-7268

NOTICE: Whoever, with intent to falsify his or someone else's true identity, willfully furnishes or causes to be furnished false information in applying for a social security number, is subject to a fine of not more than $1,000 or imprisonment for up to 1 year, or both.

Sign YOUR NAME HERE (Do Not Print)

TREASURY DEPARTMENT Internal Revenue Service
Form SS-5 (9-74)

☐ RESCREEN ☐ ASSIGN ☐ DUP ISSUED

Return completed application to nearest SOCIAL SECURITY ADMINISTRATION OFFICE

7. ___A ___B ___C ___D
8. ___A ___B ___C ___D

9.

A

AUSTIN CPA FIRM NEEDS STAFF ACCOUNTANTS. Excellent opportunity for outstanding applicants with a medium-sized growth - oriented firm. Will consider recent graduates. Send resume & salary requirements to Box X-170 American Statesman.

B

MEDICAL SECRETARY for physician. must have typing & bookkeeping skills. Permanent only. Mail resume to: P.O. Box 1434, Austin, Texas 78767.

C

MATURE PERSON needed for fast food restaurant, capable of assuming responsibilities & supervision of others. 6 days, Sundays off. Make application at 5201 Airport Blvd., 9-11 or 2-5 (Royal Burger). Ask for manager. No phone calls.

D

WELDER

Excellent opportunity for experienced welder. Must desire permanent employment & have experience in Arc & gas welding. Excellent fringe benefits. Interested persons should call: 836-0836 ext. 262.

GLASTRON BOAT CO.

PERSONNEL DEPT.
9108 REID DR.
AUSTIN, 78758

E

SECURITY GUARD Salary position! Various hours! Responsible type? Interested? Call 444-6711 Republic Personnel Service. 2101 South Interregional

F

ELECTRONIC TECHNICIAN to do drafting, design & layouts, of electrical systems. This is a design on paper job. Does not involve wiring or test type work. Apply at Decor Electronics, 4701 E. 5th, Austin, 385-0277.

G

NEED 3 brick & rock masons. $6 hr., also need 3 experienced brick layers helpers, $3 per hr. 258-2327 after 6.

H

Account Clerk Trainee $450

HIGH SCHOOL BOOKKEEPING COURSE & A DESIRE TO LEARN & EARN. 477-4026 SAM SPEARS EMPLOYMENT SERVICE 117 PERRY BROOKS BLDG.

I

PORTER NEEDED, good pay, good benefits. Contact Bob Burton at McMorris Ford, 803 West 6th.

J

OUTSIDE SALESPERSON wanted. 2-4 yrs. experience, electrical distributor, construction, industrial and/or utility. Send resume to Wesco, P.O. Box 9923, Austin, Texas 73766.

K

COOK $3.25 - $3.50 hour! Excellent firm! Busy spot! Immediate opening! Interested? Call 444-6711 Republic Personnel Service. 2101 South Interregional.

L

WANTED

Permanent full time paper cutting machine operator. No experience necessary. Mon. - Fri. 8-5. Compensation commensurate with capabilities. Position open now. Write resume & send picture. Box P-171 American Statesman.

ANSWER_____

10. _____MONTHS

APPENDIX E

Attitudes Toward Education and Careers

S.S.N. _____
(Social Security Number)

Today's Date _____
Month Day Year

VOCATIONAL INTERESTS INVENTORY

Part I

Directions:

On each of the following pages you will find a word at the top of the page. Below the word are nine pairs of other words which might be used to describe the first word. Decide for each pair of words the one you feel best describes the word at the top of the page. Then place a check (✓) in one of the 7 blanks to show how well you think it describes the word at the top of the page.

Sample:

FOOD

good	✓	___	___	___	___	___	___	bad
active	___	___	___	___	✓	___	___	passive

If FOOD is "good" (without any question), you check the blank closest to "good." If FOOD is neither active nor passive, but a little passive, then check the 4th or 5th blank.

I. SCHOOL

fast	___	___	___	___	___	___	___	slow
sharp	___	___	___	___	___	___	___	dull
soft	___	___	___	___	___	___	___	hard
good	___	___	___	___	___	___	___	bad
weak	___	___	___	___	___	___	___	strong
disapprove	___	___	___	___	___	___	___	approve
wise	___	___	___	___	___	___	___	foolish
active	___	___	___	___	___	___	___	passive
repetitive	___	___	___	___	___	___	___	varied

II. THE IDEAL JOB

hard	___	___	___	___	___	___	___	soft
active	___	___	___	___	___	___	___	passive
repetitive	___	___	___	___	___	___	___	varied
dull	___	___	___	___	___	___	___	sharp
foolish	___	___	___	___	___	___	___	wise
good	___	___	___	___	___	___	___	bad
disapprove	___	___	___	___	___	___	___	approve
strong	___	___	___	___	___	___	___	weak
fast	___	___	___	___	___	___	___	slow

III. MY JOB

weak	___	___	___	___	___	___	___	strong
slow	___	___	___	___	___	___	___	fast
repetitive	___	___	___	___	___	___	___	varied
sharp	___	___	___	___	___	___	___	dull
good	___	___	___	___	___	___	___	bad
disapprove	___	___	___	___	___	___	___	approve
passive	___	___	___	___	___	___	___	active
wise	___	___	___	___	___	___	___	foolish
hard	___	___	___	___	___	___	___	soft

IV. MY SPARE TIME

passive	___	___	___	___	___	___	___	active
weak	___	___	___	___	___	___	___	strong
disapprove	___	___	___	___	___	___	___	approve
fast	___	___	___	___	___	___	___	slow
hard	___	___	___	___	___	___	___	soft
sharp	___	___	___	___	___	___	___	dull
foolish	___	___	___	___	___	___	___	wise
repetitive	___	___	___	___	___	___	___	varied
good	___	___	___	___	___	___	___	bad

V. ME--AT WORK

wise	___	___	___	___	___	___	___	foolish
active	___	___	___	___	___	___	___	passive
varied	___	___	___	___	___	___	___	repetitive
soft	___	___	___	___	___	___	___	hard
disapprove	___	___	___	___	___	___	___	approve
bad	___	___	___	___	___	___	___	good
dull	___	___	___	___	___	___	___	sharp
slow	___	___	___	___	___	___	___	fast
weak	___	___	___	___	___	___	___	strong

VI. MY FUTURE

hard	___	___	___	___	___	___	___	soft
disapprove	___	___	___	___	___	___	___	approve
good	___	___	___	___	___	___	___	bad
passive	___	___	___	___	___	___	___	active
slow	___	___	___	___	___	___	___	fast
wise	___	___	___	___	___	___	___	foolish
repetitive	___	___	___	___	___	___	___	varied
weak	___	___	___	___	___	___	___	strong
sharp	___	___	___	___	___	___	___	dull

Name _____ Today's Date _____
Month Day Year

EDUCATION INVENTORY

General Directions

There is no time limit on this inventory. However, do not spend too much time on any one item.

When you complete the inventory, review each item to be sure you have responded. If you decide to change your response to any item, be sure to erase your first choice completely.

When you complete this inventory, turn your paper over, place your pencil on the desk, and wait for instructions from the monitor.

Name _____ Date _____

EDUCATION INVENTORY

Directions:

Read and answer each item carefully. If you do not understand a statement, quietly ask your monitor questions about it. To answer an item, circle the appropriate number that most nearly expresses your present feelings or thoughts about the statement. Wherever possible, let your own personal experience determine your answer. Do not spend much time on any item. Work rapidly. Be sure to answer every item.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
You can learn more by working four years than by going to high school.	5	4	3	2	1
The more education you have the more you enjoy life.	5	4	3	2	1
Education helps you use spare time to better advantage.	5	4	3	2	1
Only subjects like reading, writing, and arithmetic should be taught in schools.	5	4	3	2	1
Education does not help in getting a job today.	5	4	3	2	1
Most young people are getting too much education.	5	4	3	2	1
A high school education is worth all the time and effort it requires.	5	4	3	2	1
Schools encourage individuals to think for themselves.	5	4	3	2	1
There are too many fads and frills in modern schools.	5	4	3	2	1
Education only makes a person unhappy with life.	5	4	3	2	1
School work is of little help in meeting the problems of real life.	5	4	3	2	1
Education makes an individual less conceited.	5	4	3	2	1
Solutions of the world's problems will come about because of education.	5	4	3	2	1
High school courses are impractical.	5	4	3	2	1
People are foolish to keep going to school if they can get jobs.	5	4	3	2	1
Money spent on education is wisely invested.	5	4	3	2	1
Educated persons get ahead more rapidly in business.	5	4	3	2	1
Students should not be compelled to attend school.	5	4	3	2	1
Education is of more value than most people think.	5	4	3	2	1
A high school education makes a person a better citizen.	5	4	3	2	1
The money spent on education during the past several years could have been used more wisely for other purposes.	5	4	3	2	1

APPENDIX F

Attitudinal Items

Module 1

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your responses will not be part of your evaluation. Your responses will help to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
It helps to talk about or communicate your feelings.	5	4	3	2	1
One should like one's job.	5	4	3	2	1
Writing is important in the world of work.	5	4	3	2	1

Module 2

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your responses will not be part of your evaluation. Your responses will help to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Information helps a person to make decisions.	5	4	3	2	1
There are many jobs that I might be able to do now or in the future.	5	4	3	2	1

Module 3

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your responses will not be part of your evaluation. Your responses will help to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Once you select a job there is little chance for promotion.	5	4	3	2	1
Studying about job ladders helped a person to make plans.	5	4	3	2	1

Module 4

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your responses will not be part of your evaluation. Your responses will help to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Your job skills are the most important thing about your work.	5	4	3	2	1
How you act on the job can change the way others act toward you.	5	4	3	2	1

Module 5

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your responses will not be part of your evaluation. Your responses will help to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Seeing a counselor is a waste of time.	5	4	3	2	1
What I do on a test does not tell me about myself.	5	4	3	2	1

Module 6

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your answers will not be part of your evaluation. Your answers will be used to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
My job will not ever change.	5	4	3	2	1
The work experience I've gained is worthless in a different job.	5	4	3	2	1

Module 7

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your responses will not be part of your evaluation. Your responses will help to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
If you meet the requirements for a job, your choice of job sources may mean getting the job.	5	4	3	2	1
One must be able to compute percentages in order to protect oneself from being charged too much.	5	4	3	2	1

Module 8

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your answers will not be part of your evaluation. Your answers will be used to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Business letters should be carefully written.	5	4	3	2	1
Employers do not read letters of application.	5	4	3	2	1

Module 9

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your answers will not be part of your evaluation. Your answers will be used to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Learning how to fill out job application forms is important.	5	4	3	2	1
Being prepared is important in the world of work.	5	4	3	2	1

Module 10

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your answers will not be part of your evaluation. Your answers will be used to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Having a résumé helps when filling out a job application form.	5	4	3	2	1
One does not have to be factual when preparing a résumé.	5	4	3	2	1
Résumés are unnecessary.	5	4	3	2	1

Module 11

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your answers will not be part of your evaluation. Your answers will be used to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Your behavior and appearance are really important in a job interview.	5	4	3	2	1
Practice in interviewing is useful.	5	4	3	2	1
A good interview is the responsibility of the company interviewer.	5	4	3	2	1

Module 12

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your answers will not be part of your evaluation. Your answers will be used to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Your employer will always tell you what legal rights and responsibilities are yours.	5	4	3	2	1
It does help to know a worker's rights and responsibilities.	5	4	3	2	1

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your responses will not be part of your evaluation. Your responses will help to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
One should always understand the deductions made from one's paycheck.	5	4	3	2	1
The financial aspects of employments are too difficult to learn.	5	4	3	2	1

Module 14

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your responses will not be part of your evaluation. Your responses will help to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Education can prepare a person for job advancement	5	4	3	2	1
One cannot plan for job advancement.	5	4	3	2	1

Part II:

Circle the number that "best" describes your feelings about each of the following statements. Your responses will not be part of your evaluation. Your responses will help to improve this module.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Job satisfaction depends on many things.	5	4	3	2	1
A person needs to think about all the things that affect job satisfaction.	5	4	3	2	1

APPENDIX G

Module Evaluation Forms

(1) Module 1 Evaluation (filled out)

(2) Field-Test Data Sheet (blank)

Course No. 301.1

Competency No. 1
(YOUR JOB EXPERIENCES)

MODULE EVALUATION FORM

I. Reading Level - Students found the reading level (comprehension):

	very (too) difficult	difficult	moderately difficult	comfortable
Competency Statement				✓
TPO			✓	
EO			✓	
Learning Activities			✓	
Posttest				✓
Worksheets				✓
Self-Assessments				✓
Learning Resources				✓

Specific Comments: THE MATERIAL IS WELL WRITTEN. AFTER THE INITIAL CONTACT & ORIENTATION THE STUDENTS PROGRESSED FAIRLY WELL.

II. Content: Students feel content was:

highly useful	mostly useful	somewhat useful	useless
	✓		

Specific Comments: STUDENTS began to feel aware of the real necessity FOR BECOMING QUALIFIED TO ENTER INTO THE WORLD OF WORK. THEY BEGAN TO REALIZE THE IMPORTANCE OF BEING ABLE TO COMMUNICATE IN WRITING.

III. Performance - Students were able to perform tasks:

	only with much explanation	with moderate explanation	with little explanation	completely on their own
Learning Activity 1				✓
2			✓	
3			✓	
4			✓	
5		✓		
6				
7				
8				

Specific Comments: The structure of the L.A.'s WAS PLANNED WELL & STUDENTS BEGAN TO GET THE "FEEL" OF THE METHOD OF INSTRUCTION. INSTRUCTIONS ARE "COMFORTABLE".

IV. Resources: Were resources for these activities adequate?

Resources were adequate for this first module.

Course No. 301.1

Competency No. 1

		yes	no	comments
Learning Activity	1	✓		easy to understand
	2	✓		" " "
	3	✓		" " "
	4	✓		explanation was required
	5	✓		some explanation required on this
	6			sentence structure, grammatical
	7			forms — basic Spanish fundamentals
	8			for 2 students - the rest were OK

V. Instructor Input - Please point out difficulties with this module or any part of it. Be specific. Suggest solutions, substitutions, and/or alternatives.

The students in this particular group can all speak fairly good English with exception of one. They can also speak & understand Spanish but are not proficient in the writing of Spanish.

They feel they should concentrate on the English language to read & write because the tests are in English. They resort to Spanish only in cases where a more thorough explanation is desired by the instructor to clarify terminology they are not accustomed to.

Since the material is new to most, & the way this individual instruction is presented the first day of instruction was used to clarify the procedure. Afterwards the system became more clear in their minds & they are well on their way to progress.

The resource material is quite good and the instructor can make it easier for the students by separating the work sheets and answer keys into separate containers (boxes) plainly labelled so that they won't bunch-up at the resource box.

The enabling objectives are also good. The learning resources are also adequate.

In the case of South American students who have a strong background in the (over)

SPANISH LANGUAGE, THE TRANSLATIONS IN SPANISH WILL BE A DEFINITE AID. THE STUDENTS FROM THE U.S. WITH A SPANISH LAST NAME WOULD PREFER TO DO THEIR WORK IN ENGLISH.

THE CONSTANT USE OF THE DICTIONARIES IS A MUST, THIS GIVES THEM AN OPPORTUNITY TO LOCATE, DEFINE & TO ADD NEW WORDS INTO THEIR VOCABULARY.

MODULE I IS SELF CONTAINED, SELF-EXPLANATORY AND VERY WELL CONSTRUCTED. THE POST TEST WAS ADEQUATE AND UNDERSTOOD BY ALL.

Rumby Calcaño
20 JAN 76

COURSE Language Arts 302 OCCUPATIONAL KNOWLEDGE

FIELD-TEST DATA SHEET

CYCLE NO. _____

MODULE _____

TEACHER'S NAME _____

(1)	(2)	(3)	(4)	(5)	(6)			(7)	(8)	(9)										(10)		(11)			(12)	(13)	
STUDENT NAMES	SOC.SEC. NUMBER	AGE	ETHNIC CODE	LANG. ABILITY CODE	PRETESTS			DATE STARTED	MODULE PRE-TEST	LEARNING ACTIVITIES										MODULE POSTTESTS		POSTTESTS			DATE COMP	TIME REQUIRED	
					C.A.T. READ	LEVEL 4 MATH	OCCUP. KNOW.			1	2	3	4	5	6	7	8	9	10	A	B	C.A.T. READ	LEVEL 4 MATH	OCCUP. KNOW.		MODULE	POST

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INSTRUCTIONS FOR USING FIELD TEST DATA SHEET

It is important that you record the progress of every student using the modules that have been developed. We have attempted to simplify the form as much as possible. Please follow these directions closely. Keep all Posttest answer sheets for field tested modules in a separate file folder.

Column 1. STUDENT NAME: (last name, first name, and middle initial) Necessary for Module 1 only.

2. SOCIAL SECURITY NUMBER: (taken from the cycle roster) Necessary for Module 1 only.

3. AGE: (ask the student for his age) Necessary for module 1 only.

4. ETHNIC CODE: B - Black S - Spanish-American O - Other
W - White I - Indian
Necessary for Module 1 only.

5. LANGUAGE ABILITY CODE: 1 - indicates fluent use of English
2 - has some difficulty understanding/reading English
3 - has great difficulty with English
Necessary for Module 1 only.

6. C.A.T. LEVEL (READING & MATH): (list the grade equivalent scores. These may be obtained from the counselor's office.) Necessary for Module 1 only.

7. START DATE: (the date on which the student begins work on the competency) Necessary for each module.

8. PRETEST: Indicate P for Pass or F for Fail. If passed, the student then takes the Posttest immediately. If no pretest is taken, leave blank.

9. LEARNING ACTIVITIES: Place a (✓) for each learning activity successfully completed by student.
* If student tests out of one or more learning activities on the pretest, place an X as in the corresponding learning activity column to indicate that the student successfully challenged. Each Learning Activity box should have and X or a ✓ when the student has completed the module.

10. MODULE POSTTESTS: (most tests do not have alternate forms, so we will mainly use the "A" column) Indicate with a P that the student passed, and an F if the student failed the posttest. If the student fails, use the following line to show which Learning Activities are completed before he takes a retest. Then again show P or F in the Posttest column. If student tested out on particular learning activities on pretest, he/she should complete the entire posttest also.

11. POSTTESTS: C.A.T. and Occupational Knowledge will be recorded at completion of cycle.

12. DATE COMPLETED: Date student completed the module.

13. TIME REQUIRED: Under "Module" indicate hours used to complete pretest and learning activities only.
Under "Post" indicate hours used to complete the Posttest only.

When this data sheet is turned in, attach to it all pre- and posttests which have been completed by the students.

APPENDIX H

Professional Rating Form

Name _____ Date _____ Module No. _____

GRID
PROFESSIONAL RATING FORM

Please indicate your reaction to the following items by circling the appropriate number. If you did not have an opportunity to observe that part of the project mentioned in an item, write N/A by number 5. The information compiled from these rating forms will be used to improve the implementation of the Career Orientation course and as part of the project evaluation. Your cooperation is appreciated.

Item	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
This Career Orientation Module integrated career knowledge and language arts skills.	5	4	3	2	1
The students were motivated to work.	5	4	3	2	1
Classroom management was efficient.	5	4	3	2	1
Bilingual instruction hindered some students' progress.	5	4	3	2	1
More emphasis should be placed on careers.	5	4	3	2	1
More emphasis should be placed on basic skills.	5	4	3	2	1
The module was appropriately sequenced.	5	4	3	2	1
More audiovisual presentations are needed.	5	4	3	2	1
The television equipment and studio atmosphere hindered learning.	5	4	3	2	1
The way the Grid was used for this module was effective.	5	4	3	2	1

If you have further comments about this project or the telecomputer grid, please write them on the back of this sheet.

APPENDIX J

Analysis of Variance Summary Tables

TABLE 9

Analysis of Variance of CAT Reading for Bilingual and Monolingual Instructors

Source of Variation	Sum of Squares	df	Mean Square	F ratio	p
Total	106,751.86	21	-	-	-
Between Subjects	86,512.36	10	-	-	-
Groups	654.01	1	654.01	.07	-
Error (b)	85,858.35	9	9,539.82	-	-
Within Subjects	20,239.50	11	-	-	-
Trials	5,858.23	1	5,858.23	3.70	.10
Interaction	131.86	1	131.86	.08	-
Error (a)	14,249.42	9	1,583.27	-	-

TABLE 10

Analysis of Variance of Occupational Knowledge Assessment for Bilingual and Monolingual Instructors

Source of Variation	Sum of Squares	df	Mean Square	F ratio	p
Total	118.55	19	-	-	-
Between Subjects	67.05	9	-	-	-
Groups	1.25	1	1.25	.15	-
Error (b)	65.80	8	8.23	-	-
Within Subjects	51.50	10	-	-	-
Trials	36.45	1	36.45	20.13	.01
Interaction	1.25	1	1.25	.72	-
Error (a)	13.80	8	1.73	-	-

APPENDIX K

Final Report of Project External Evaluator
(Letter from Dr. R. E. McClintock to Mr. Terry Newell, Project Officer)

Robert E. McClintock, Ph. D.
Research Consultant
3314 Glenzita Street
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July 26, 1976

Mr. Terry Newell
Office of Career Education
U. S. Office of Education
Department of Health, Education & Welfare
Room 3100
Seventh and "D" Streets, S.W.
Washington, D. C. 20202

Dear Mr. Newell:

I have recently completed my final site visits and my review of a draft form of the final report for the Texas Telecomputer Grid/Bilingual Career Education Project (Office of Education Grant No. G007503401) at the American Technological University.

The overall quality of evaluative efforts was high, considering the fact that the project was exploratory and demonstrative in nature and the necessity for production of new materials for almost all of the instructional endeavors. The project staff was very conscientious in collecting an extensive quantity of raw data and, insofar as I could determine, utilized the best available techniques for data analysis. I was pleasantly surprised at both the variety and amount of data obtained for final evaluation, as it exceeded my expectations at the time of my mid-year site visit and review.

The first objective of the project (demonstration of the flexibility of the Texas Telecomputer Grid as a viable delivery system for bilingual career education) appears to have been effectively reached and to be well supported by objective data analyses in the final report. The finding of significant changes in cognitive level was strengthened by use of an inventive, but appropriate, regression technique as well as the more traditional analysis of variance. It should be noted that student subjects at different sites were probably not identical in background; however, my interviews with instructional support personnel both in Killeen and in San Antonio led me to conclude that the samples were sufficiently comparable to produce valid research results.

The finding of no difference in affective level was not particularly surprising. In my judgement, it was partly due to the high levels of motivation of the necessarily volunteer subjects. In studies such as this project, control groups are difficult to

equate; I looked at records of subjects in both experimental and control groups, but found no differences so strong as to cause major problems in interpreting contrasts between groups. Efforts of the project staff to provide adequate controls were deemed successful.

In the semi-annual report, the project staff proposed a secondary evaluation of the first objective in the form of reactions of educators to use of the Grid following an informal conference using Grid facilities. This conference was not held, being dropped during late stages of project implementation. As you will recall, I pointed out in my mid-year review the potential problems that delay of this "interact conference" could cause. While it is regretable that cancellation was necessary, it is my opinion that the loss of this data source was a desirable alternative to placing excessive time pressures on student posttest data sources near the close of the project term.

The second objective of the project (demonstrating how career education materials may be presented in various communication modes) was more difficult to assess than was the first objective. I would consider the second objective to have been reached although the project certainly did not reach definitive conclusions on all points concerning modes of communication on the Grid. An enormous amount of study will need to be done in future projects before all these relationships are understood fully.

I was able to review only a small portion of the curricular materials developed by the project staff, and I confined that review to procedures for field-testing and quality and extent of data from the module evaluations. The procedures were sound and I found well established routines for collection and analysis of evaluative data. I found no reason to question the internal evaluator's conclusions as to the quality of the materials developed during the course of the project.

With respect to use of these materials on the Grid, the finding of no relationship between student attitudes and amount of student-interaction during the session was surprising to me. This was particularly so in the light of a significant relationship between student attitudes and the use of special graphics and audio-visual materials. The greater relative importance of graphics over student-teacher interaction needs clarification in future research studies. My discussions of these findings with staff personnel led me to conclude that they were properly founded in objective data and were not artifacts of faulty procedure of analysis.

In summary, the project director and his staff appear to have accomplished what they set out as goals in their original project proposal. While some of the implementation elements outlined in their

semi-annual report were not completed, a high proportion were carried out and some additional evaluations were included in the final report which had not previously been proposed. I view these changes as appropriate in view of experience gained during the progress of the project. The staff dealt with a field which does not have extensive prior research, dealt with instructional materials which had to be validated during the process of usage, and dealt with student subjects from a population that is known to be difficult to work with; they did a creditable job in substantiating as many findings as they did during a single project.

Sincerely,

Robert E. McClintock
Research Consultant

cc: Dr. T. C. Smith